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BULLETIN OF THE

Pan American Union

VIVA AMERICA!

PAN AMERICAN DAY NUMBER

FEBRUARY 1942

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THE PAN AMERICAN UNION

WASHINGTON, D. C.

L. S. ROWE, *Director General* PEDRO DE ALBA, *Assistant Director*

THE PAN AMERICAN UNION, now nearly 52 years old, is an international organization created and maintained by the twenty-one American Republics: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the United States, Uruguay, and Venezuela. Originally known as the International Bureau of the American Republics, it was established in 1890 in accordance with a resolution passed April 14 of that year by the First International Conference of American States, which convened at Washington in October 1889. April 14 is celebrated annually throughout the Americas as Pan American Day.

The work of the Union was greatly expanded by resolutions of the Second Conference, held at Mexico City in 1901; the Third, at Rio de Janeiro in 1906; the Fourth, at Buenos Aires in 1910; the Fifth, at Santiago, Chile, in 1923; the Sixth, at Habana in 1928; the Seventh, at Montevideo in 1933; and the Eighth, at Lima in 1938. The creation of machinery for the peaceful settlement of inter-American disputes is one of the outstanding achievements of these Conferences.

PURPOSE AND ORGANIZATION

The purpose of the Pan American Union is to promote peace, commerce, and friendship between the Republics of the American Continent by fostering constructive cooperation among them. The Union is supported by annual contributions from all the countries, in amounts proportional to population, and its services are available to officials and private citizens alike. Its affairs are administered by a Director General and an Assistant Director, elected by and responsible to a Governing Board composed of the Secretary of State of the United States and representatives in Washington of the other American governments.

ADMINISTRATIVE DIVISIONS

The administrative divisions of the Pan American Union are organized to carry out the purposes for which it was created. There are special divisions dealing with foreign trade, statistics, economics, intellectual cooperation, music, juridical matters, agricultural cooperation, travel, and labor and social information. All these divisions maintain close relations with official and unofficial bodies in the countries members of the Union. The Columbus Memorial Library contains 110,000 volumes and many maps. The BULLETIN of the Pan American Union, published monthly in English, Spanish, and Portuguese, is the official organ of the institution. For a list of other publications of the Union, see the inside back cover.

PAN AMERICAN CONFERENCES

The Pan American Union also serves as the permanent organ of the International Conferences of American States, usually referred to as the Pan American Conferences. In addition to preparing the programs and regulations, the Union gives effect to the conclusions of the Conferences by conducting special inquiries and investigations and by convening or arranging for special or technical conferences in the intervals between the International Conferences.

Special Number for Pan American Day, April 14

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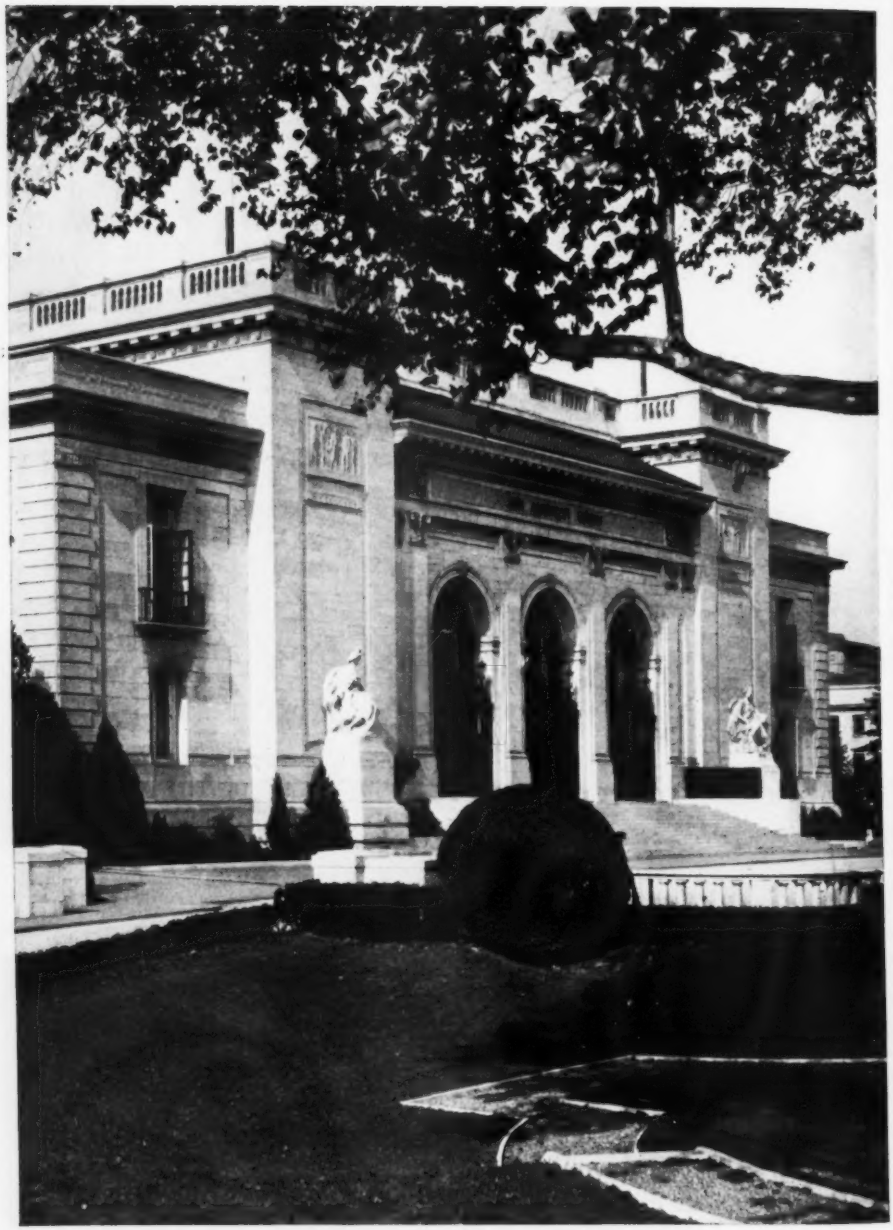
(The contents of previous issues of the BULLETIN *of the Pan American Union can be found in the "Readers' Guide" in your library)*

ILLUSTRATION AT SIDE: PATIO, PAN AMERICAN UNION



THE PAN AMERICAN UNION, WASHINGTON, D. C.

"This building is a confession of faith, a covenant of fraternal duty, a declaration of allegiance to an ideal."—ELIHU ROOT

BULLETIN OF THE PAN AMERICAN UNION

VOL. LXXVI, No. 2 FEBRUARY 1942

Pan American Day

Foreword

L. S. ROWE

Director General, Pan American Union

THIS issue of the BULLETIN is dedicated to the observance of Pan American Day, April 14, the anniversary of the foundation of the Pan American Union in 1890, at the First International Conference of American States. In the fifty-two years that have elapsed since that time the American Republics have sent their representatives to meet in seven more such conferences and in many others of a special character, the latest of which is the momentous Third Meeting of Ministers of Foreign Affairs of the American Republics, which will have convened in Rio de Janeiro before this is read. The plenary sessions will be held in Tiradentes Palace, named in honor of an early champion of Brazilian independence.

As a result of the inter-American conferences we have witnessed the development of a continental system firmly based upon the spirit of justice, fair dealing and respect for law.

This system involves the following principles:

1. Collective responsibility for the preservation of the peace of the Continent.
2. Collective action in case of a threat from without.
3. Nonintervention of one republic in the internal affairs of another.
4. Prohibition of the use of force as an instrument of national policy.
5. Observance of the pledged word and faithful fulfillment of treaty obligations.

In the present hour of crisis the American republics and their citizens, young and old, find inspiration and support in these principles, the outgrowth of their experience, moral convictions and voluntary association. A phrase from the Declaration of Lima well summarizes the considered stand of the American nations: "They seek and defend the peace of the continent and work together in the cause of universal concord."

The Third Meeting of Ministers of Foreign Affairs of the American Republics

Program

As announced in the January 1942 issue of the BULLETIN, the Third Meeting of Ministers of Foreign Affairs of the American Republics held its opening session in Rio de Janeiro on January 15, at the suggestion of the governments of Chile and the United States.

The Meeting was requested in accordance with the provisions of a declaration entitled *Reciprocal Assistance and Cooperation for the Defense of the Nations of the Americas*, adopted at the Second Meeting held in Habana during July 1940. The declaration states:

> Any attempt on the part of a non-American State against the integrity or inviolability of the territory, the sovereignty or the political independence of an American State shall be considered as an act of aggression against the States which sign this declaration.
>
> In case acts of aggression are committed or should there be reason to believe that an act of aggression is being prepared by a non-American nation against the integrity or inviolability of the territory, the sovereignty or the political independence of an American nation, the nations signatory to the present declaration will consult among themselves in order to agree upon the measures it may be advisable to take.

On December 17, 1941, the Governing Board of the Pan American Union, after a study of suggestions received from the governments, members of the Union, adopted the program for the Third Meeting. It was agreed that the observations and suggestions of the governments relative to the program should be transmitted to the Meeting for the information of the delegates.

The program is as follows:

I

THE PROTECTION OF THE WESTERN HEMISPHERE

Consideration of measures to be taken with a view to the preservation of the sovereignty and territorial integrity of the American Republics:

A. The examination of measures to curb alien activities carried on within the jurisdiction of any American Republic that tend to endanger the peace and security of any American Republic, including the exchange of information regarding the presence in the American Republics of undesirable aliens.

B. The consideration of measures which might be undertaken by the American Republics now for the development of certain common objectives and plans which would contribute to the reconstruction of world order.

II

ECONOMIC SOLIDARITY

The consideration of measures to be taken with a view to fortifying the economic solidarity of the American Republics, including

1. The control of exports in order to conserve basic and strategic materials.

2. Arrangements for the increased production of strategic materials.

3. Arrangements for furnishing to each country the imports essential to the maintenance of its domestic economy.

4. The maintenance of adequate shipping facilities.

5. The control of alien financial and commercial activities prejudicial to the welfare of the American Republics.

Projects in Inter-American Agricultural Cooperation

E. N. BRESSMAN
Director, Division of Agriculture, Office of Coordinator of Inter-American Affairs

THE need for developing closer economic, political, and cultural ties between the Americas was emphasized in April 1940 in an article by the then Secretary of Agriculture, now Vice President, Henry A. Wallace, entitled *Inter-American Agricultural Cooperation,* which appeared in the issue of the BULLETIN of the Pan American Union commemorative of the Fiftieth Anniversary of that institution. The article stressed the importance of agriculture's role in the cooperative program and indicated that there was a great need for commodity collaboration in the Western Hemisphere with regard to important surplus crops like corn, wheat, cotton, and coffee. Such collaboration on a world scale had already been tried and proved effective in the case of such products as tin, rubber, and sugar.

In addition to commodity collaboration on surplus crops, Mr. Wallace mentioned the necessity for cooperation in the production of complementary products, such as rubber, quinine, bananas, cocoa, coarse wool, abacá, vegetable oils, drugs, perfumes, flavoring extracts, herbs, tea, and many tropical fruits, in order to give Latin American countries greater purchasing power by developing a wider basis of complementary trade between them and the United States.

Cooperative projects that had already been undertaken included exploratory agricultural surveys conducted by the Department of Agriculture in Haiti, Paraguay, Ecuador, and Colombia, at the request of the governments of those countries. Also, much cooperative work was under way in connection with advising on marketing problems and, in the scientific field, collecting and identifying insects affecting commercial agricultural crops and advising as to crop- and animal-disease control.

Here it is proposed to point out some of the concrete projects undertaken in the field of inter-American agricultural cooperation in the nearly two years that have passed since Mr. Wallace's broad statement of the need for such action—important steps toward the development of closer ties, increased trade, and stronger economies in this hemisphere.

First in importance among these steps, in my opinion, was the creation of the Haitian-American Agricultural Development Corporation, or Société Haïtiano-Américaine de Développement Agricole, as it is known in Haiti. The State Department, in a press release issued on May 5, 1941, announced: "In an endeavor to decrease the present total dependence of the United States upon . . . distant areas . . . for essential rubber supplies, the American Government and the Government of Haiti have reached a new long-term agreement for the development of agriculture. . . ."

The negotiations with the State Department and the Export-Import Bank that had led to this development were participated in by Thomas A. Fennell, Agricultural Advisor to the Haitian Government and

now President of the Société Haïtiano-Américaine de Développement Agricole, His Excellency Élie Lescot, then newly elected President of Haiti, and the writer, as Assistant Director of the Office of Foreign Agricultural Relations, United States Department of Agriculture.

President Lescot, in the July 1941 issue of *Agriculture in the Americas*, a publication of the United States Department of Agriculture, made the following statement in regard to the program to be carried out under this agreement in his country:

> When I returned to Port-au-Prince early in May to assume the office of President . . . I was able to bring word to the people of Haiti of one of the most far-reaching economic steps in our national history. I was able to tell them that the farmers of Haiti . . . were henceforth to enjoy the fullest possible degree of agricultural cooperation with the United States. The long-term program announced jointly by our two Governments on May 6, 1941, will affect most of the agricultural products that can be grown in Haiti. We shall become less dependent on the few staple crops that have long formed the basis of our economy. Henceforth we shall produce more of the deficit products of the Western Hemisphere, which are now imported from distant lands. . . . We have a potentially large market for the manufactured goods and the processed agricultural products of the United States. We are buying now only a small fraction of the clothing, the machinery, the flour, and the lard that we would use if we could afford them. But we have more than a market to offer. We have the friendship and good will of 3,000,000 souls who love freedom so much that they would die to defend it—as their ancestors died in the war for Haitian independence. . . . We are proud of our role in showing the world that the Good Neighbor Policy means Democracy in Action.

For some months prior to the reaching of the agreement for this cooperative project, the United States Department of Agriculture, through surveys and experimental plantings in Latin America, had been laying the groundwork for actual rubber production in every country in tropical America. A central rubber experiment station had been established in Costa Rica, and propagation and breeding stations in Honduras and Haiti. The Haitian agricultural expansion plan, of which rubber is the keystone, developed as a result of the Department's rubber project.

Briefly, this plan is as follows: The Corporation is to plant rubber trees. It is also to try to eliminate plant diseases and irregularity of yields that make difficult the production of such tropical crops as oils, spices, and fibers, for which the Western Hemisphere heretofore has depended on distant sources of supply. The United States is to furnish the technical skill and the capital for this expansion. The immediate objective of the organization, as set forth by its president, Thomas A. Fennell, in an article entitled *Haiti Makes Rubber History*, in the July 1941 issue of *Agriculture in the Americas*, is the establishment of plantations to serve as nuclei from which peasant plantings of tropical crops will spread.

At the present time Haitian farmers concentrate their production on a few staple crops, such as coffee, cotton, sugar, and bananas. These products are often subject to depressed prices on world markets. The new plan is designed to direct a considerable part of their efforts toward the production of new tropical crops now scarcely known in Haiti. Valuable spice, drug, oil, and fiber products are regarded as having real commercial possibilities.

The new program, as Mr. Fennell points out, is in no way intended to alter the present pattern of land ownership in Haiti, which is essentially a country of small peasant-owned farms. In this connection he says:

> Women work on the farms just as men do Whole families clear and till the land, harvest the crops, and transport them to market. That system is the foundation of the whole Haitian way

of living, and any program that would tend to alter it would be doing Haiti a disservice. . . . For a long time all of us were victims of the generally accepted fallacy that rubber production is necessarily the province of the large corporation, not suited to the practices of the small land holder. That notion has done much to limit the cultivation of rubber in the American tropics. . . . Small holders not only can cultivate rubber but can produce it in competition with large holders to greater advantage than perhaps any other tropical crop. That thesis is fundamental to the whole program for the agricultural expansion of Haiti. Under the Corporation's plan of operation, contracts will be entered into with the peasants for the production of rubber, cacao, and other products which it is desired to encourage. The Corporation will furnish seed, provide technical supervision and assistance, and agree to purchase the crops after they are harvested. Its land holdings will be limited to its central plantations, which will be used largely for demonstration and experimental purposes. All agricultural labor to be used on the plantations will be recruited in Haiti. . . .

So far as the United States is concerned, it also stands to gain from the cooperative endeavor. Only crops that are noncompetitive with United States agriculture will be grown. All of them are imported in large quantities from the Far East. If the plan is realized in full, a final planting of nearly 70,000 acres of high-producing strains of *Hevea* trees will result. This amount of rubber—nearly 35,000 tons per year after the plantings reach full production—represents more than 5 percent of total United States rubber consumption in a normal year . . . . The entire Western Hemisphere will benefit greatly, I believe, from this experiment in agricultural cooperation between two sister American Republics. What can be done quickly in Haiti, because of the country's small size, can in the long run be done in many another Latin American country.

The supervising agency for the new program, the Société Haïtiano-Américaine de

RURAL HAITI

The Haitian-American Development Corporation is promoting in Haiti the growing of rubber and other crops complementary to and not competitive with United States products.

Développement Agricole, is an organization formed through cooperation of the Governments of Haiti and the United States. Under its charter, this organization is authorized to carry on a business whose purpose is to foster agricultural and craft enterprises in Haiti. It may grow, process, and buy and sell for local and export markets nearly all types of agricultural products.

The organization of the Société Haïtiano-Américaine de Développement Agricole has been designed to facilitate the greatest possible cooperation between governmental and private entities. If we look at the matter realistically, it is evident that there are certain things that can best be undertaken by government. On the other hand, only a form of organization that leaves open adequate opportunities for the exercise of private initiative can expect to obtain the maximum results.

From the Haitian point of view, money spent for the development of this project will help ease the country's present financial crisis just as much as if it were spent on a public works project. In addition, since the expenditure will be for producing plantations, it is expected that the investment will soon begin to bring returns and that the jobs created will be permanent and grow in number and value. It is believed that if this one project alone can be carried out, the national income of Haiti can be more than doubled.

The creation of this organization is important not only because of its significance in Haiti but because, as pointed out by Mr. Fennell, it may serve as a pattern for similar agricultural development in the other American republics—possibly in as many as half.

Another development of major importance was the planning of a project to establish an Institute of Tropical Agriculture—a project that was merely a long-cherished idea, dating from the First Inter-American Conference on Agriculture in 1930, at the time that Mr. Wallace's article on *Inter-American Agricultural Cooperation* appeared in this BULLETIN. In closing that article, he said:

> Finally, one project that looms large in plans for future inter-American agricultural cooperation is the proposed Institute of Tropical Agriculture, which would be established with private funds in a Latin American Republic. It is hoped that our Government can help initiate this project, cooperate in maintaining it, and furnish some of the technical specialists. . . .

In a press release issued September 26, 1941, Nelson A. Rockefeller, Coordinator of Inter-American Affairs, announced the setting up in his office of an Agricultural Division whose primary objective was to be the establishment and operation of the Institute. Mr. Rockefeller said:

> The present emergency has greatly increased the need for agricultural cooperation in the Western Hemisphere. In order to meet this need, the Agricultural Division has been created in the Office of Inter-American Affairs. The new Division will be concerned primarily with the establishment of a Tropical Institute to be located in one of the other American Republics. . . . This project was first publicly announced by Vice President Wallace, as Secretary of Agriculture, when he outlined its objectives as follows to the Eighth American Scientific Congress held in Washington in May 1940: "Promotion of a better balanced agricultural economy in the Western Hemisphere; preparation of comprehensive data on the agricultural problems of the American republics; development of a broad knowledge of tropical agricultural pests and diseases; solution of serious problems in crop and animal production; and creation of understanding among future agricultural leaders of the Americas."

This new Agricultural Division, of which I am Director, has on its administrative staff, as Assistant Director, Atherton Lee, who for seven years has been director of the Federal Agricultural Experiment Station at Mayagüez, Puerto Rico, and as Senior Agronomist, Robert A. Nichols, who for the past seven years has been

Photo by Stadelman, U. S. D. A.

A BANANA PLANTATION

Bananas are an important item in inter-American trade. The Caribbean countries send many to the United States, and Argentina purchases a considerable number from Brazil.

Director of the Agricultural Experiment Station at Saint Thomas, Virgin Islands.

Preliminary planning for the Institute was done by the Inter-American Committee on Tropical Agriculture, appointed by the Governing Board of the Pan American Union and headed by Dr. Héctor David Castro, Minister to the United States from the Republic of El Salvador. The membership includes also representatives of Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Peru, Venezuela, and the United States.[1]

It is significant that this Institute has the endorsement and support of three important committees—the Interdepartmental Committee on Cooperation with the Other American Republics, the Inter-American Committee on Tropical Agriculture, and the Advisory Committee on Inter-American Cooperation in Agricultural Education.

Last August a party of scientists from the United States Department of Agriculture was sent to the Tropics to inspect sites offered for the Institute. This survey party was headed by Ralph H. Allee, agricultural education specialist of the Office of Foreign Agricultural Relations, and included George R. Boyd, Principal Engineer, Bureau of Agricultural Chemistry and Engineering, and Dr. Wilson Popenoe of Antigua, Guatemala, Collaborator of the Office of Foreign Agricultural Relations. They inspected, from the standpoint of suitability for tropical agricultural research and education, proposed Institute

[1] *The Division of Agricultural Cooperation of the Pan American Union serves as the Secretariat of the Organizing Committee.*—EDITOR.

sites offered by the Governments of Venezuela, Brazil, Ecuador, Costa Rica, and El Salvador. Local agricultural technicians assisted them in each of these countries. It is planned to send a second mission to survey additional sites in countries that subsequently submitted concrete offers of locations.

The Advisory Committee on Inter-American Cooperation in Agricultural Education, of which Knowles A. Ryerson, of the California College of Agriculture, is chairman, and I am secretary, devoted one entire session of its conference held in Washington, D. C., on November 13 and 14, 1941, to a discussion of the Institute of Tropical Agriculture. In the course of this discussion, the development and introduction of tropical complementary products to help create a more balanced economy in the hemisphere was recognized as closely related to increasing the supply of living necessities available to the peoples of the Americas. Various suggestions were made relating to the functioning of the Institute as a force toward a more stable and mutually beneficial economy, as well as toward a more satisfying social situation.

Recognizing the necessity of collaborating on problems that can be better solved by all the American republics working together than by any one of them working alone, we are obviously faced with the necessity of delimiting the field of activities envisaged for the Institute. The collection and analysis of data would have to proceed in conjunction with various exploratory projects for which evidence already exists. The procedure of "learning about by working with" tends to keep surveys of conditions down to earth and at the same time to minimize the development of programs without sound factual bases. Thus, general management and enterprise studies of actual farming operations would, wherever possible, accompany biological research. Furthermore, these would be related to studies of group relations made as part of rural social organization programs. The general process can be summarized as involving orientation, exploration, experimentation, demonstration, and integration.

Consideration of geographic factors determining plant and animal development is important. Study of the hemisphere as an ecological entity with physical, biological, and social aspects indicates a broad scheme for determining direction of emphasis. There appears to be no need to await the results of studies of the place of each individual country or geographical zone in the hemisphere picture or the exact function of the tropical American areas in world economy. A "master plan," if such is feasible, would necessarily grow out of the energetic prosecution of individual projects founded on the best information available and carried out in a spirit of exploration and experimentation.

Many apparently envisage the Tropical Institute as an organizing center. As such, it would attempt to determine *where* a given piece of work should be carried on rather than *how*. This would imply a traffic-managing and standardizing institution concerned with determining what research and leadership training is required and which of the existing institutions and agencies can best carry out the various jobs indicated. This is an attractive possibility and again suggests a direction in which activities could develop.

If the Institute is to assure an economic base for cultural activities, it will have to distribute its effectiveness over the tropical area. An academic island isolated from the varying problems of the respective tropical regions would be just another institution. It would have little opportunity to supply the continuity of effort that is urgently required or to relate technical discoveries to desirable changes in human

relationships. However, such a position will have to be won through the effectiveness of the program developed. To expect the Institute to establish itself through abstract endeavors would be largely visionary and would invite failure. An adequate physical plant and a concrete program of research and personnel training is essential to the creation of that *esprit de corps* which will carry the Institute through its formative days. Those who suggest initiating the Institute purely as a Board of Regents or a degree-granting and standardizing institution such as the University of London should study the respective conditions under which the University of the State of New York and the University of London were founded and the trend in their relationships to education.

Various program suggestions of a more or less specific nature that were made by members of the Committee in connection with the Institute involved the following:

Coordination of activities of the alumni of North American agricultural colleges in Latin America.

Coordination of the program of student exchange (selection of candidates, the supplying of information on background of students, assistance to educational institutions in serving students, follow-up of students after their school experience).

Preparation of students for work in the tropics.

Encouragement of complementary rather than competitive crops in the tropics.

Collection and creation of materials of instruction and reference tools (preparation of reference works in Spanish and Portuguese, collection of standard works on tropical agriculture, provision of reference service with printed materials and biblio-film).

Development of a central base for special surveys and studies, such as an inventory of forest resources, the control of diseases and insect pests of plants and animals, the breeding of the new and better varieties, and the economics of production and consumption.

Training of personnel for Latin American agricultural schools, experiment stations, and other government services.

Coordination of extension of technical information to areas of need.

Assistance in the organization and administration of extension systems, experiment stations, and vocational schools.

Coordination of health activities (training of laboratory technicians, training of sanitation inspectors, development of programs involving domestic water supplies, waste disposal, insect control).

Investigation of home welfare needs and program possibilities (home sanitation, home management, nutrition).

The Advisory Committee on Inter-American Cooperation in Agricultural Education took important action with regard to the Institute. It resolved:

1. To commend the work accomplished and the report submitted by the special mission that visited the alternative sites for the Institute of Tropical Agriculture.

2. To approve the idea of an "Inter-American Institute for Research and Education," primarily agricultural in its interests, for the administration of the Institute of Tropical Agriculture and for any related institutes, with the usual safeguards provided in the Civil Service laws and regulations and the method of settlement and adjustment pursuant to the procedure of the General Accounting Office. The Committee emphasizes that the motivating interest insofar as it is concerned should be that of agriculture, in view of the fact that this constitutes the means of livelihood for such a large proportion of the population of the Americas.

Organizations such as the aforementioned Société Haïtiano-Américaine de Développement Agricole will be closely interrelated with the Institute. As these organizations are developed, they will call upon the Institute to furnish keen young scientists and research workers from all the American republics. Then, as the Institute solves research problems in connection with tropical agricultural crops of which it is desired to develop production, and outlets are needed for these products, they can turn to the development organizations to create them, in the event they cannot be furnished by private industry.

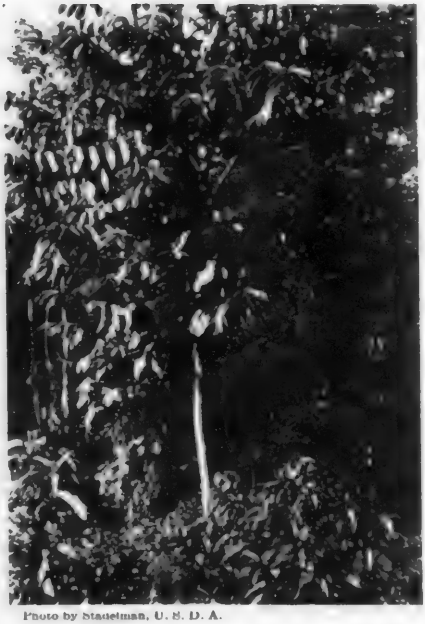


Photo by Staudeman, U. S. D. A.

CASTILLOA ELASTICA

Members of the Rubber Survey sent to Latin America by the United States Department of Agriculture found that this rubber-yielding tree occurs frequently in Central America.

Because of the relatively greater importance in the program of cooperation with the other American republics of the Société Haïtiano-Américaine de Développement Agricole and the Institute of Tropical Agriculture, I have discussed them more in detail than I propose to discuss the following specific projects that have also been undertaken:

A survey of rubber-producing possibilities in tropical American countries by the United States Department of Agriculture was begun in July 1940, under an appropriation of $500,000 authorized by the United States Congress and with the cooperation of the Latin American republics involved. A number of parties were sent into the field, with the understanding that the results of their rubber surveys and the ensuing experimental work would be available to any American republic and to both large and small growers. This survey work, now completed, was done under the able direction of Dr. E. W. Brandes of the Bureau of Plant Industry of the United States Department of Agriculture, and he is responsible for the enormous task of shaping up and integrating the individual reports made by the survey parties on their findings in the various countries. This rubber research effort has met with enthusiastic support from the other American republics. They have to date collectively appropriated for such research in their countries an amount equal to that appropriated by the United States Congress for this kind of work. These surveys have resulted in the establishment of centers for rubber research in Turrialba, Costa Rica, and Jérémie, Haiti, and nurseries for growing large numbers of rubber seedlings in practically all the other tropical American countries. The most encouraging result has been that practically all the rubber-producing countries in Latin America have made informal agreements to collaborate in rubber research, and actual production of rubber is now being developed, as in Haiti under the project previously explained.

All agricultural phases of the surveys made by the most important technical missions sent to the other American republics to assist them in their agricultural programs have been under the direction of the Office of Foreign Agricultural Relations of the United States Department of Agriculture.

The governments of Bolivia and the United States have agreed on a comprehensive long-term plan for collaboration to foster continued mutually beneficial economic relations between the two countries and to develop the national economy and

resources of Bolivia. As the first step in this program of collaboration, a mission was recently sent to Bolivia to make a thorough technological and economic survey of the communications needs and the agricultural and mineral potentialities of that country. The head of this Economic and Resources Mission is Merwin L. Bohan, formerly Commercial Attaché at Bogotá, Colombia, who made an exploratory survey in Bolivia in 1937. He is assisted by Rex Pixley, formerly Assistant Fiscal Adviser to the Haitian Government, and a party of six technicians. It is hoped that the findings of the mission will be translated into actual developmental operations to fit the needs of Bolivia.

At the request of the Governments of Mexico and Honduras, H. T. Edwards and J. H. Kempton, tropical plant specialists of the United States Department of Agriculture, last summer conducted a survey in those countries to investigate possibilities of developing complementary agricultural products. Important crops whose possibilities were investigated included: abacá, imported from the Philippines for manufacturing rope; cinchona, imported from the East Indies for the manufacture of quinine; chia, imported from China for manufacture of oil used in the paint and varnish industry; derris, imported from the East Indies for use in insecticides; kapok, imported from the East Indies and used in upholstering and in life preservers; and licorice, imported from Asia Minor and used in the manufacture of chewing tobacco.

Two specialists of the Bureau of Plant Industry of the Department of Agriculture, B. Y. Morrison and B. B. Robinson, left in August 1941 at the request of the Peruvian Government, to participate in a general exploratory survey of the agricultural resources of Peru. In Lima they were joined by the third member of the survey party, Francis H. Thurber of the Bureau of Agricultural Chemistry and Engineering of the same Department, who had been in Latin America for several weeks, making a survey of technical methods used in processing agricultural products in Argentina, Brazil, and Chile. It was the purpose of Mr. Morrison, who is in charge of the Division of Plant Exploration and Introduction of his Bureau and who headed the survey party, to advise on crop plants, including medicinal and drug plants, while Doctor Robinson was assigned to specialize in fiber flax production and processing, and Doctor Thurber in technical processes.

A detailed survey of Ecuadorean agriculture got under way in September 1941 with the sending of the first two members of a mission to study the agriculture of that country and to formulate, in cooperation with the Ecuadorean Government, a pro-

Photo by Stadelman, U. S. D. A.

KAPOK IN FRUIT AND FLOWER

The fiber produced by this tree is excellent as insulation, upholstery, and filling for life-preservers.

Courtesy of United Fruit Co.

MANILA HEMP, OR ABACA

Since Manila hemp preserves its tensile strength while wet, no substitute equals it for marine cordage. It comes from a plant closely related to the banana.

gram of agricultural diversification with special emphasis on crops for which there is normally a good demand in the export market. Ernest G. Holt, chief of the Biology Division of the Soil Conservation Service, heads the mission and is assisted by six other agricultural technicians.

The United States Department of Agriculture, at the request of the Ecuadorean Government, had made preliminary surveys of rubber-growing possibilities and general agricultural production in that country, and as a result an Ecuadorean agricultural experiment station program was established under the direction of Dr. Arthur G. Kevorkian, formerly of the Department. The sending of the latest mission was another result of those surveys.

This mission plans to give attention to crop and livestock production; the nation's dependence on exports and imports; soil types; climatic conditions; and other factors affecting its agricultural economy. Specific items for consideration will be the development of plantation rubber production; the rehabilitation of the production of high-quality cacao, of which Ecuador was once the world's leading producer; and the production for export of coarse wools, which the United States imports.

At the request of the Cuban Government, a technical mission from the United States Department of Agriculture, under the leadership of G. Laguardia, as Principal Agricultural Economist of the Sugar Division, made during January and

March 1941 a tour of investigation in connection with a proposed program of public works and general reconstruction. The mission examined and reported on the practicability of projects designed to promote the diversification and rehabilitation of Cuban agriculture.

A project to establish an Inter-American Agricultural and Mineral Technical Advisory Service is just being gotten under way. Technical assistants are to be made available to the agricultural and mining agencies of the other American republics: (1) to assist such agencies in their present operations and advise in regard to effecting their improvement; (2) to report upon the agricultural and mineral resources of those republics with special reference to increasing production and exports of raw materials; and (3) to collaborate with the Inter-American Development Commission, a body created by the Inter-American Financial and Economic Advisory Committee (established by the First Meeting of Ministers of Foreign Affairs of the American Republics at Panama in 1939), in projects to develop production of commodities for which there is a new or complementary market in the United States or the other American republics. It is felt that the scale on which this is being conducted, involving as it does a much larger number of technical assistants than any previous project in the program, will provide a better basis for determining the effectiveness of this type of cooperation with the other American republics.

Another development in the field of inter-American relations was the organization of the American Society of Agricultural Sciences, established in response to a recommendation of the Eighth American Scientific Congress, which met in May 1940 in Washington, D. C. The Society was organized by Scientific Congress delegates from Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Peru, the Dominican Republic, Uruguay, Venezuela, and the United States. Its aims are to advance scientific agriculture in the republics through individual and collective effort; to provide a central organization for the coordination of the agricultural sciences; to hold meetings, issue publications, and otherwise disseminate information; to provide for exchange of research findings, ideas, and experiences among members; and to promote friendship among workers in agricultural sciences in the American Republics. While there were agricultural societies in each of the American countries prior to the formation of this Scoiety, there was no central organiza-

THE VANILLA PLANT

The slender pods containing vanilla beans may be noted hanging from the broad-leafed vine, a member of the orchid family native to Mexico.

tion for discussion of mutual agricultural problems.

In the educational field, aside from the Institute of Tropical Agriculture previously discussed, various programs for the training of technicians in agencies of the United States should be mentioned. Under three such programs, trainees are now working and studying in the Rural Electrification Administration, others are soon to be here in the Soil Conservation Service of the United States Department of Agriculture, and some chemists from Argentina are on their way to study in the Department's four great regional laboratories for research on the industrial uses of surplus agricultural products. At the present writing, 50 seniors and professors from one of the best agricultural colleges in South America are visiting our agricultural institutions.

Also in the category of educational projects were the Latin-American fiestas and exhibits held during the past year at Greenfield, Iowa, and other towns in the Middle West. They were designed to bring to rural people, through simple extension methods, some realization of and interest in the problems in our inter-American relationships. These affairs, which were in the nature of experiments to determine the possibilities in visual education methods in rural areas, proved eminently successful. Over a quarter of a million people have viewed the exhibits and, in addition, thousands of farm folks have participated in the fiestas.

By Automobile from the Caribbean to the Strait of Magellan

HERBERT C. LANKS

How would you like to make an automobile tour the length of South America, through deserts, jungles, and plains, and many times across the mighty Andes? After five months, Major Paul Pleiss and I finally succeeded in being the first American motorists to drive a car from the Caribbean Sea to the Strait of Magellan, almost at the tip of the South American continent. We used a standard model station-wagon type of automobile, with an extra gasoline tank built into it, and we camped out most of the way except when we came to the larger cities.

This amazing trip carried us over 13,000 miles down the west coast and up the east coast of South America. We crossed every republic and visited every capital with the exception of Paraguay and its capital, Asunción. Down toward the tip of the continent we traversed desolate Patagonia for thousands of miles, for days encountering no town and following mere tracks across the barren wind-swept pampa.

We unloaded our car at the port of La Guaira, a short distance from Caracas, Venezuela, our first South American capital. From here we continued some 1,100 miles over the famous Simón Bolívar

Highway to Bogotá, the capital of Colombia. This is a spectacular route connecting the Caribbean and the Pacific, for it continues through Quito to Guayaquil, Ecuador. At first the Highway goes through both fertile and arid country in Venezuela, and then begins the ascent into the Andes as it approaches Colombia. Here it surmounts the cold, desolate paramos, those passes and high plains above timber line which are almost entirely devoid of vegetation. At this 14,000-foot altitude both the car and our bodies felt the effects of the lack of oxygen. We were short of breath if we engaged in the slightest exertion and the car lost up to a third of its power.

These were not paved highways we traveled, although the Simón Bolívar Highway is surfaced with crushed stone so that most of it can be traveled at nearly any season of the year. However, the dust in January is terrific, and since the road is not very wide and winds constantly after reaching the mountains, it is very difficult to pass the many trucks and buses that make use of this route. The road is continually ascending or descending or going around curves so that the scenery never becomes monotonous. Along the way are many villages.

Whereas Venezuela is only partly mountainous, in Colombia the Andes divide into three ranges that cover a large part of the country. Between the Venezuelan border and Bogotá the road runs at a

Photograph by Herbert C. Lanks

ZIGZAGGING THROUGH THE VENEZUELAN MOUNTAINS

On the 1,100-mile stretch of the Simón Bolívar Highway between Caracas and Bototá hardly ten miles are straight.

Photograph by Herbert C. Lanks

ON THE WAY FROM QUITO TO GUAYAQUIL

While descending nearly 12,000 feet from the highest point between Quito and the coast, one passes from Andine heights to a zone of tropical heat and luxuriant vegetation.

considerable elevation, seldom less than 8,000 feet above sea level; it is somewhat wider than in Venezuela.

Bogotá, about 8,560 feet high, and rather cold when we were there, is a very modern city in many respects, although it is an old Spanish colonial center. Often called "The Athens of South America," in Humboldt's phrase, it has long been renowned for its culture. After leaving Bogotá the Simón Bolívar Highway continues to ascend to Andean passes whence great panoramas are visible for tremendous distances.

West of Bogotá the road we followed is joined by another coming down from the north, a different section of the Pan American Highway System. It is hoped that eventually a route can be found across the Isthmus of Panama to meet the section traversing Mexico and Central America. Parts of this are still lacking, but it is planned eventually to have a continuous Pan American Highway, all the way from the United States through the republics of North, Central, and South America. The Fourth Pan American Highway Congress held at Mexico City last September entrusted to a technical committee the final selection of the common frontier points in the system that have not yet been fixed. When this great highway is finally completed it will link the capitals of all the mainland republics and be a great monument to Pan American cooperation and concerted action.

Southward through Colombia we followed the wonderful Cauca Valley, one of the richest and most famous in the southern continent. It is a peaceful land of sugarcane, rice, citrus fruit and cattle, tucked away between two ranges of the mighty Andes. As the road approaches the border of Ecuador it rises out of the valley and again climbs high in the Andes through extremely rugged and wild mountain scenery, sometimes descending into very steep-sided chasms of great depth. In this region it has been found necessary to establish one-way traffic with chains across the road in many places. Beyond one of these a car may not pass until given special written permission by the guard. Before granting this permission he calls his colleague at the next chain by telephone to find out whether the way is clear. Then he tells you just where to be especially careful and allows you a certain amount of time to go through to the next chain. This is repeated time after time, all day long, until nine such chains are passed in one section.

As we neared Ecuador we saw more and more Indians, generally dressed in brightly colored garments, especially in red ponchos. They farm the steep sides of the Andes, making the landscape appear like the pattern of a crazy quilt. Horses trample out the grain on the threshing floors, after which it is tossed up into the wind to let the chaff be blown away.

Quito is still higher than Bogotá, being 9,500 feet above sea level. Eighteen miles north of it, the Highway crosses the equator, a point marked by a monument. Because of the altitude it is not hot there but rather cool. Quito retains much more of the Spanish colonial aspect than Bogotá. It is sometimes called "The City of Churches"; most of them were built in the days of the Spaniards and have interiors and sculptures of surpassing beauty.

In Ecuador we were in the northern lands of the great Inca Empire conquered by the Spaniards under Pizarro. Some of the roads we traversed no doubt follow the routes of the highways for which that empire was noted. Many are still built by Indian laborers in the fashion of centuries ago: that is, a single lane of large stones laid flat in the middle with dirt lanes on both sides. There we saw many towering snow-capped peaks of the Andes,

some of them among the highest in South America after Aconcagua. At places we passed almost beneath them and felt their chilly breath.

On leaving Quito we could not go directly into Peru because part of the Pan American Highway is not completed between Ecuador and its neighbor to the south. So we took one of the most spectacular roads of the whole trip, right from the heart of the Andes down to sea level at Guayaquil. In the heights it is cold, often with snow in the air, but as we descended it became warmer and warmer and the vegetation more and more dense until at length we again arrived in the tropical lowlands, where the air is heavy and warm. At first we passed orange trees, and finally miles and miles of bananas. From Guayaquil we had to be ferried across the gulf of the same name to the border of Peru.

The Peruvian section of the Pan American Highway follows the arid coast of Peru, largely a sandy waste except where oases are formed along the rivers, and is paved most of the way, except in the northern part. These thousand miles constitute the longest paved stretch of the Highway in South America.

Lima, known as "The City of the Kings" because it was founded on Epiphany (1535), is indeed a charming city to visit. Its weather is sunny and delightful in January, February, and March, when the nearby Pacific beaches are popular. It has many avenues of handsome new houses.

We did not continue down the coast from Lima but made a great detour up into the Andes to Cuzco, the seat of the old Inca Empire, and around Lake Titicaca, the highest body of water in the world navigated by a steamship, and on to La

Photograph by Herbert C. Lanks

HARVEST DANCE ON THE SHORE OF LAKE TITICACA

Harvest rites have been celebrated since the dawn of history. Here the whirling, many-hued woolen skirts of the women give an especial picturesqueness to the scene.

Photograph by Herbert C. Lanks

SHEEP IN PATAGONIA

Great sheep farms provide the main occupation in the far south of Chile and Argentina.

Paz. The Carretera Central is the highest highway in the world, surmounting Anticona Pass at 16,127 feet. It is probably also one of the most spectacular roads, and certainly was outstanding on our trip through South America. We crossed high Andine ridges many times and descended into great valleys inhabited formerly by peoples of the ancient Inca Empire and today by their descendants. We saw stupendous archaeological remains of that ancient civilization.

After passing Lake Titicaca, we arrived at the handsome city of La Paz, situated in a great bowl at 12,000 feet elevation: mighty snow-clad Illimani towers above it. Although Sucre is legally the capital of Bolivia, Congress meets in La Paz and the President resides there.

From La Paz we descended to the Pacific coast once more and rejoined the Pan American Highway System 1,400 miles north of Valparaíso. We drove through the barren nitrate fields in northern Chile, where for hundreds of miles the surface of the desert is covered with this valuable mineral. This was a dry and dusty stretch over very rough roads, so rough that in places we abandoned them for the desert surface itself. This is always passable, for it never rains there. We had to carry reserve supplies not only of gasoline but also of water. Pounding across this terrain necessitated a week's stop for repairs when we finally arrived in Santiago, the capital of Chile.

We liked Santiago especially. It is a charming modern city of beautiful parks and flowers where the people are equally charming. From Santiago the usual route

Photograph by Herbert C. Lanks

THE MIGHTY ANDES

Highways now cross the Andes in a number of places, threading their way up and down from one range to another.

to Argentina is across the cordillera by way of the pass where stands the famous Christ of the Andes. We made an excursion across this spectacular gap in the mountains but returned to Santiago in order to continue into southern Chile and visit the famous lake region.

South of Santiago the roads are much better than in the north, for this is rich farm land. As we went farther into the south temperate zone we were in country very similar to our eastern United States. The many lakes of this region are as beautiful as they are reputed to be. We crossed the Andes for the last time by the Tromén Pass into Argentina. Camping among the lakes on both the Chilean and the Argentina side was one of the most pleasant experiences of the trip.

We skirted the eastern slopes of the Andes as we went southward toward the tip of the continent and then struck across bleak and desolate Patagonia, where the winds never cease blowing. Old Man Winter was coming hard on our heels as we drove straight over the never-ending pampa where there are no towns and hardly any roads. For most of the time we followed mere tracks across the waste with only occasional flocks of wild ostriches and guanacos to break the monotony along the way. Once in a great while we would strike an isolated *boliche*, or tavern, on the lonely wastes. Finally we turned eastward across the heart of Patagonia and headed for the Atlantic coast. At San Julián we came out to the Atlantic. There we found a better road, which we were able to follow all the way down to the Strait of Magellan. Here at Magallanes we reached our great objective, the city farthest south in the world.

It was April by now, ice was freezing along the roads, winter was pressing us hard, and so we turned around and for the first time our course was towards the

Photograph by Herbert C. Lanks

A CONCRETE HIGHWAY NEAR MONTEVIDEO

The shadows of the plane trees along one of Uruguay's excellent roads are conducive to enjoyment of the pleasant countryside.

Polar Star. It was 2,000 miles over the endless pampa to Buenos Aires, with the road always disappearing into the blue haze of the flat horizon. Around Bahía Blanca the pampa became greener and we entered the great wheat and cattle country of Argentina.

Even a week did not suffice to give us more than a passing glimpse of Buenos Aires, a great city of two and a half million population. From there we ferried across the River Plate to Uruguay, where we encountered both the best and the worst roads of the trip. At first they were all concrete, but toward the northeastern border they were not thus surfaced and became quagmires from unusual rains.

After crossing the boundary, we drove for over 250 miles along the beach that is the highway in southern Brazil; it is much like that at Daytona, Florida. There are many German immigrants in southern Brazil who keep their German dress and customs. Curitiba, some 50 miles inland, is a most delightful little city, but São Paulo, several hundred miles farther on, is a great metropolis with many skyscrapers. It would remind one of Chicago if it were not for the palms and semi-tropical vegetation. The roads between São Paulo and the capital of Brazil have a hard dirt surface over which one can make almost as good speed as on a paved highway. Thus before long one arrives at Rio de Janeiro, famed the world over for the beauty of its harbor. Here on its wide beaches and in its charming parks and shaded streets we passed a grateful week of rest before we loaded our car on the boat and sailed back to our own country, after five months around South America.

Photograph by Herbert C. Lanks

MOTORING ON THE BEACH IN SOUTHERN BRAZIL

In good weather three hundred miles of beach make an ideal highway.

Some Aspects of Recent Social Legislation in Latin America

In reviewing some recent aspects of Latin American legislation designed to protect the worker and his family—the hope of the future in every healthy and prosperous country—there come to mind the words of Edgardo Rebagliati, the director of the Peruvian Social Security Fund, at the dedication of the Workers' Hospital in Lima: "It is truly praiseworthy that, while other nations are destroying each other, and their leaders and their people spend their energy and their lives in the fury of war, the leaders and the people of America are maintaining their tradition of concord and vying with each other in an effort to protect their human capital and to improve the well-being of their citizens. As an example of that viewpoint and that philosophy . . . stand the achievements and the projects undertaken by all the nations of the continent to bring about a better and a nobler world."

This paper brings together notes on a few such achievements and projects, most of them belonging to 1941. The first section discusses legislation on working and living conditions, such as the codification of labor legislation; hours of labor; rest periods; measures for the benefit of special classes of workers; the protection of children, mothers, and the family; the settlement of labor disputes; labor inspection; and colonization programs. The second section, devoted to social welfare, touches on social security, workers' housing, industrial hygiene, and safety measures, price control, and the cooperative movement.

This article, prepared in the Division of Labor and Social Information, is largely based on material that has appeared in its official publication Noticias, No. 5, February 1941, and subsequent issues. Such material is obtained from official sources.

Working and living conditions

Codification of labor legislation.—A Panamanian law of July 28, 1941, combined in one measure various provisions, formerly scattered in different legislation dealing with labor contracts, working conditions (hours, weekly rest, annual vacations, wages), the work of women and children, industrial disputes, and responsibility and compensation for certain occupational risks.

Hours of labor and rest periods.—Recent legislation in El Salvador limits to 8 hours the working day of employees in commercial establishments, and provides for weekly rest in certain of these establishments in the city of San Salvador from one p. m. on Saturday to midnight on Sunday. (July 31, 1941.)

Sunday closing has been made compulsory in Panama for commercial and industrial establishments in cities of more than 15,000 inhabitants. (March 27, 1941.)

The working day of passenger bus drivers in Peru was limited to 8 hours by recent legislation. (September 23, 1941.)

Protection of special classes of workers.—Much legislation enacted in 1941 applies to workers who, because of the special type of work they do, are often excluded from the social benefits provided in labor codes or general labor legislation.

The Brazilian statute (February 20, 1941) dealing with permanent and temporary employees of the states, territories,

municipalities, and Federal District specifies their salary scale and provides old-age and sickness benefits, and, for employees who are expectant mothers, a 90-day leave of absence with pay. Special regulations were issued on February 27, 1941, for domestic servants in Brazil; a work book (*carteira profissional*) is now made compulsory, and the general form of contract for services and the obligations of both parties are prescribed.

Cuban regulations for the work of bagmenders at the port of Cienfuegos went into effect on July 2, 1941, and legal restrictions adopted on October 6, 1941, strictly limit permits for home work in needlework industries.

A series of Chilean decrees approved wage scales and other working conditions for longshoremen in Valparaíso (June 28, 1941), San Antonio (April 30, 1941), and certain other ports (June 14, 1941).

For home needleworkers the Peruvian government, on August 5, 1941, created in other cities of the nation state-owned shops such as already existed in Lima, so that women needleworkers might "profit to the greatest possible extent from their work and enjoy the benefits of social legislation."

Uruguayan legislation of December 20, 1940, covers hours of labor, wages, housing, medical services, and industrial hygiene for workers in the rice fields.

CHILDREN, MOTHERS, AND THE FAMILY.—On April 19, 1941, the Brazilian government adopted measures of a social, civil, and financial character designed to organize and protect the family. Among them figure loans for workers planning to be married, one type to be used for the purchase of a family home, another for necessary clothing and home furnishings; family subsidies; preference in federal, state, and municipal positions for married men; and facilities for the education of children in large families. Other provisions legalize, under certain conditions, the marriage of relatives in the third degree of consanguinity; exempt the indigent from fees for civil marriage and for the recognition of natural children; authorize food allowances; and impose a surtax on bachelors, widowers, and childless couples.

The Dominican Republic created, on November 15, 1940, the National Board for the Protection of Mothers and Children under the chairmanship of the Secretary of Health and Welfare; the Board is charged with providing both social benefits and medical care for mothers and children.

SETTLEMENT OF LABOR DISPUTES.—In many countries existing social legislation has been made still more effective by creating an atmosphere of greater harmony between capital and labor.

In Chile, several of the permanent conciliation boards provided for by the Labor Code for compulsory action in collective disputes arising in specified industries were organized on May 30 and June 17, 1941; they deal with agriculture and the food and milling industries in various localities.

On March 29, 1941, the provisions relative to the right to strike, granted by the Mexican Federal Labor Law, were amended so as to recognize strikes as *legal* suspension of work. Further requirements were added for declaring and giving notification of a strike, and a new procedure to be followed in settling a dispute was prescribed: Boards of Conciliation and Arbitration, which formerly could act only after a strike had been declared, are now empowered to take action before it is called.

LABOR INSPECTION.—Certain aspects of national services in this field were improved in several countries. In Brazil, for example, maritime labor commissions charged with inspection of working conditions in shipping and in the fishing

VALPARAÍSO HARBOR

Wage scales and other working conditions for longshoremen in Valparaíso were prescribed by a decree issued in June 1941.

industry were reorganized on June 12, 1941.

On September 5, 1941, the National Service of Agricultural Production and Rural Education of Haiti received broad powers to inspect working and sanitary conditions in industrial and agricultural enterprises throughout the country.

According to the provisions of a resolution of August 8, 1941, all candidates designated by the Venezuelan labor inspection service for the positions of inspector and of special labor commissioner must take a special 30–60 day training course, that will include theoretical and practice work and studies of social legislation.

COLONIZATION.—A wiser agricultural resettlement policy has been introduced in several countries, to make better use of available national human resources by means of more rational agricultural production. The program for this purpose includes the extensive resettlement and colonization plans, providing for the parcellation of hitherto unworked lands, that have been undertaken in Argentina, Brazil, and Paraguay to make up for the cessation of foreign immigration. These plans, it should be noted, consider colonization a distinctly national problem, whose solution should be left no longer to scattered private or local initiative, but included in the centralized activities of the government.

The Argentine colonization law of September 2, 1940, created the National Agrarian Council, which will put into effect a national program. The principal functions of the Council are to plan, methodically and progressively, for the ques-

Photograph by Rebecca Smalts

A RURAL HOME IN PARAGUAY

A recent law in Paraguay authorizes the government to put land, seeds and tools at the disposal of every farmer.

tion of rural property grants throughout the nation; to organize a campaign to increase the population of the country; to recommend transfers of farmers living on marginal lands to more productive areas; and to develop family, communal, and Indian colonization.

In Brazil, a law of February 14, 1941, empowers the federal government, through the Ministry of Agriculture and with the cooperation of the states and the municipalities, to establish agricultural colonies where Brazilian citizens and immigrant farmers may have an opportunity to become rural property owners.

The policy of the Paraguayan Agrarian Reform Law, authorizing the government to put lands, seeds, and tools for farm work at the disposal of every farmer, was extended, on September 8, 1941, to provide for repatriated citizens, urban residents in need because of the scarcity of work, and for farmers lacking sufficient funds to tide them through the period between planting and harvest. The Department of Lands and Colonization will organize school-colonies for these citizens where they will receive a year's training to make them eligible to own a plot in an agricultural colony. Moreover, believing that there should be available in each locality a center where farmers may go for aid, consultation, and guidance, the government on the same date decreed that in every village throughout the country a "Farmer's House" (*Casa del Agricultor*) should be organized, to consist of a branch of the Agricultural Bank of Paraguay and agencies of various government bureaus concerned with agriculture and colonization.

Social welfare

To give a more complete idea of recent Latin American legislation to benefit those gainfully employed, at least some of the progress in the fields of social security, housing, industrial hygiene and safety, price control, and cooperative societies should be noted.

SOCIAL SECURITY.—The scope of Chilean social security legislation was extended on May 16, 1941, when members of fire departments were granted compensation for accidents suffered and illnesses contracted while on duty.

The social security benefits established in Panama on March 21, 1941, will cover —with the exception of "war risks"— illness, invalidity, old age, and death and, "when the financial status of the Social Security Fund permits," unemployment and industrial accidents.

In January 1941, Peruvian medical service and other assistance were declared available to insured workers in the Provinces of Lima and Ica, and the collection of the workers' social service contributions, which had not been required before that time, was begun. On February 18 the necessary regulations were issued, and thereby the whole program of compuslory social security formulated in 1936 became effective; this includes sickness, maternity, invalidity, old age, and death benefits.

A forward step was also taken by Mexico toward the establishment of social security, for which preparations have been under way for several years. In June 1941, a Technical Commission was created to draft a new bill on the subject.

With a view to liberalizing the existing laws on labor accidents and occupational diseases, the President of Uruguay signed a law on February 28, 1941, that expands the field of existing legislation, formerly

Courtesy of São Paulo Bureau of Colonization

SETTLERS IN SÃO PAULO, BRAZIL

The Federal Government is empowered to establish agricultural colonies where Brazilian citizens and immigrant farmers may have an opportunity to become rural property owners.

applicable only to workers employed in a limited number of industries, and increases all compensation, which in previous legislation "was notoriously low and did not properly compensate for injuries caused by industry with its present mechanized production." In Uruguay, too, the law of January 3, 1941, made insurance against invalidity, old age, and death compulsory for owners of businesses or those working independently, and to that end a special "Section of Employers' Retirement," was created in Industry, Commerce, and Public Service Retirement Fund.

A social security organization that transcends national boundaries is the newly created Inter-American Social Security Committee, founded in Lima in December 1940. This committee will make possible "an organized and permanent exchange of information among the social security institutions of the American countries, which will serve as a basis for convening, at some future time, an inter-American conference on social security." It adopted "the basic principles of the resolutions on social security approved by the Labor Conferences of the American States Members of the International Labor Organization, which met at Santiago, Chile, in January 1936 and at Habana in December 1939."

Courtesy of the Coordinator's Office

EDUCATING THE PUBLIC

The text of this poster reads: "Social security prevents beggary in old age."

WORKERS' HOUSING.—On June 23, 1941, Paraguay joined the Latin American countries having a National Housing Council.

In Peru the government dealt with the problem of housing for workers who were left homeless by the May 1940 earthquake in Callao by ordering, in April 1941, the construction in that port, at government expense, of two housing projects.

The Venezuelan housing problem will be under the supervision of the Workers' Bank, in accordance with new regulations for that institution issued July 11, 1941. The bank is entrusted with the erection or purchase of multiple-family dwellings costing not more than 30,000 bolívares and the construction of low-cost housing projects.

INDUSTRIAL HYGIENE AND SAFETY.—In this field, too, progress has been made. For example, the new general industrial hygiene and safety regulations approved on November 25, 1940, in Chile, are of prime importance. They fix in detail the minimum hygiene and safety standards to be maintained in mines, industrial and commercial establishments, transportation and public services; special provisions set hygiene and safety standards in unhealthful and dangerous industries and especially prohibit the employment of women and minors in certain work.

Argentina established, at the beginning of 1941, the Council of Industrial Safety,

THE MINISTRY OF PUBLIC HEALTH, LA PAZ, BOLIVIA

under the chairmanship of the director of the National Labor Office. The Council was created to promote a campaign to prevent industrial accidents and occupational diseases and to stimulate compliance with existing legislation in this field.

On April 25, 1941, a special commission was established in Brazil to codify industrial hygiene standards, especially as regards employment in unhealthful industries and the prevention of accidents and occupational diseases; provisions on these matters were formerly scattered in legislation dealing primarily with hours of labor, minimum wages, and other like matters.

Health measures to prevent malaria among workers in alluvial mines were adopted by Colombia on July 3, 1941.

The Dominican Republic adopted, on July 28, 1941, regulations for the protection of persons engaged in mining gold and other metals and minerals.

Pneumoconiosis prevention and other hygiene and safety measures not previously treated satisfactorily in mining inspection regulations were instituted in Peru on January 30, 1941.

PRICE CONTROL.—Recent legislation on this subject shows that the governments are aware of the need of protecting workers and the public in general against a scarcity of articles of prime necessity and against price increases not justified by world conditions.

During 1941 Argentina issued several decrees in application of law 12,591, on the supervision of maximum prices for articles of prime necessity. The prices of such commodities as a certain type of bread sold over the counter, rice, eggs, and other foodstuffs were fixed, and the export of rice and some other commodities was forbidden.

A decree of August 2, 1941 created a fund of 500,000 paper pesos to commandeer or purchase such commodities for direct sale to the public.

Since July 24, 1941, Chile has exercised price control over building materials. On the same date producers and warehousemen were instructed to declare what stocks of beans they had on hand. On June 26, 1941, rules for facilitating the shipment of articles of prime necessity to the northern region of the country were drawn up, obliging shipping companies to give preference to those articles over wines.

The government of Haiti has taken even more extensive measures. The decree-law of September 5, 1941, entrusts to the National Service of Agricultural Production and Rural Education control over the purchase and sale of vital articles and raw materials and over prices, to ensure the productive development of the national economy.

The National Price Regulation Board in Caracas and local boards in other parts of the country were created in Venezuela on October 1 last; these are to control not only the prices of articles of prime necessity, as defined by law, but also rents.

THE COOPERATIVE MOVEMENT.—Many advances in this field were also noted. In 1941 legislation regulating cooperative societies was promulgated in Bolivia and Peru for the first time.

In Bolivia the government decided that, to counteract the scarcity of articles of prime necessity and corresponding price increases, the organization of consumers' cooperatives would be the best measure. These societies are expected to provide food, clothing, housing, furniture, medicaments, and other goods for the personal and household use of their members; they will be granted exemption from taxes; preference in the allocation of foreign exchange, in ration quotas, and in the granting of loans; reduction in freight charges; and other advantages.

In Peru the emphasis on cooperatives was placed on agricultural organization among small- and medium-scale farmers and in Indian communities. The Bureau of Agriculture and Cattleraising of the Ministry of Promotion and Public Works has established a Section of Agricultural Cooperatives to encourage, organize, recognize, and control such societies, and to issue regulations for the various cooperatives, whether they are devoted to the development of agricultural and stockraising activities or to rural industries in general.

Brazil provided, on March 19, 1941, supervision over cooperative societies, defining their duties and those of official supervisory offices, the administrative procedure, and the procedure of appeal in case of infraction of the new provisions.

The government of Mexico established some years ago a credit system for workers who had formed cooperative societies and for small-scale independent producers in general. This credit for cooperative purposes will, in the future, be regulated by the law of April 30, 1941, which created the National Bank to Promote the Cooperative Movement. The duty of the new institution will be to provide credit for cooperative societies and credit unions, to perform other functions of a mortgage bank, to act as agent of such societies and unions in the purchase of material needed by their members for industrial development or for home use and in the sale of their products, and to organize and administer the Workers' Savings Bureau.

Presenting Cuba, Our Good Neighbor

ALFRED L. LUPIEN

Now, in these days of our Good Neighbor Policy, in these days of awakening or reawakening interest in our Latin American neighbors, near and distant, is the time for all good men, especially teachers and more especially teachers of Spanish, to come to the aid of their country. Teachers of Spanish now find themselves in rare circumstances. They do not have to apologize for their work. They do not go begging for students on whom to try out their latest verb drills. Adults, college and even high school students, are thirsting for information about Latin America, are thirsting for knowledge of the language spoken, with slight local variations, by all but two of the republics south of the United States.

In line with this national policy and public interest it is the duty of all who can, particularly teachers, to learn more about Latin Americans and their language, right from the source, at first hand. By this I mean that you should visit Latin America and talk with Latin Americans. The people that just moved into that house next door aren't neighbors until you talk with them and they talk with you. Mere proximity, even mutual interests, don't make good neighbors. There must be personal contact and there must be intercommunication.

That all sounds well, you say, but those Latin-American neighbors are more than a country mile distant. Very true, and truer if you have never visited any of them. Argentina, Mexico, Peru, Cuba do not seem nearly so far to those Americans—I should say North Americans—*who have visited those countries* as they once did. To me, for example, Cuba was just a name with geographical, historical, rumba associations before I visited it last summer. Now it is a country, a semitropical paradise, where people live, real human beings who sing our songs as well as their own, applaud our movies, read our books, use our manufactured goods, and idealize our great statesmen. In their frank manner they would say they love us Norteamericanos. I should like all the Latin Americans, their homes, urban and rural, their cultures, but most of all themselves, similarly to come to life for me, to step out of geography and history texts and cinema romances, to become American neighbors. And I wish the same for you.

The fact remains, you say, that those countries are geographically distant, expensively distant, for those who, like this writer, would like to see, to live in, to come to know one and all. For us in the eastern United States one of those countries, Cuba, is not very distant geographically, compared to many points of tourist interest in our own country or even compared to Europe, which before the war was not too distant for many travelers, far more than have ever visited Latin America. You can almost drive to Cuba, 1,500 of the 1,800 miles between New York and Habana. Yet, except for the people interested only in changing bars with the seasons (the kind of tourist that does travel to Cuba in some numbers, and the kind of tourist that does American good will no good in any country), Cuba has been pretty much

neglected as a center of tourism. As many good Americans as meet Sloppy Joe should meet and communicate with José, the Cuban barber, the tradesman, the agricultural worker, or just José, the human Cuban.

Few serious tourists aim a trip solely and deliberately at Cuba. Most North Americans who see Cuba see it on a one- or two-day stop-over from a cruise ship. Then what do they see? Most of Habana, including the fabulous Capitol, Sans Souci, and the Casino. Efficiently guided sightseeing cars rapidly cover all the high spots of historical interest, all that will appeal to lovers of the quaint. For Habana is quaint; it's foreign; it's tropically exotic. One-day tourists end their superficial round of the city fascinated—and still feeling superior. Those who have conducted these visitors, dined them, danced them, all have made their handsome profits. So everybody's happy—except the Good Neighbor Policy, for it has profited little.

Cuba is an excellent place to start getting acquainted with our fellow Americans. (Like all Latin Americans, Cubans resent the way we reserve the term *Americans* for ourselves.) Go there seriously with that purpose in mind. Live there; mingle with the people; ride with them in their *guaguas* (buses); shop with them; talk with them; share their amusements; for the length of your stay do as the Cubans do. See more of Cuba than Habana; find out something of the country's history; learn about its New Deal; see how people there make their living; find out about the country's resources for better living. What are its ties with us? How can these ties be strengthened?

When you have done all this, and you feel that you know Cuba and the Cubans know you, it's time enough then to make the acquaintance of another neighbor. Furthermore, the time is coming, after this war, of course, when travel to Central and South America will be easier and cheaper than it is now. The Pan American Highway, when completed, and lower steamship fares, bound to come, will bring extensive Latin-American travel closer to the tourist's pocketbook. Meanwhile, go to Cuba.

If you are a student or teacher, why not go to school in Cuba? It has one of the oldest universities in the Americas, founded in 1728, a university with a fine cultural tradition, housed in magnificent classical buildings. A six-week summer session at the University of Habana (full matriculation fee, $40) offers a variety of courses in the language and literature, as well as the geography, history, and economics, of our Spanish-American neighbors. Last summer, when the University's first summer session was held, all but two of the courses were given in Spanish; that offers an excellent means of tuning up your Spanish ear and developing your skill in using the oral and written language. As a further service, last summer the Universtiy sponsored weekly excursions in and about Habana of interest to students of history, geography, education, and economics. Two hundred dollars would easily see you through the summer session there.

(It would be a good idea for some philanthropic person or organization to offer scholarships for that amount to deserving high-school students who expect to continue the study of Spanish in college, and to college students who have been successful in the subject and contemplate entering a vocation in which the extra polish on their language skills afforded by a summer in Habana would be an advantage in their chosen work.)

Yes, $200 is quite sufficient for a modest summer in Habana. One can travel from New York to Miami by train, super-de-

Courtesy of Cuban Tourist Commission

COLONIAL HOUSES IN TRINIDAD, CUBA

Founded more than a century before the Pilgrims landed on Plymouth Rock, charming Trinidad will give any one from Cuba's northern neighbor the sensation of being definitely "abroad."

Courtesy of Cuban Tourist Commission

ENTRANCE TO THE UNIVERSITY OF HABANA

Last year the University had a highly successful summer school, whose courses were enjoyed by many students from the United States.

luxe, for approximately $95 round trip, by bus for $60, by car for $50. From Miami he can proceed by boat, an overnight trip, for $33.50 round trip; from Key West by boat for $23; or from Miami via Pan American Airways for $36, a rare opportunity for one desiring a plane trip at a price comparable to other means of travel. And what airline has more romantic and glamorous associations than Pan American Airways?

In the summer off-season in Habana, one can live very reasonably even in first-class hotels. For example, at one of the best, located close to the shore, you can get a single room with bath at a dollar a day. In a hotel charging more moderate rates, a room with bath and three meals comes to about $70 for a six-week period. Similar accommodations in a private home would be approximately $50 for the six weeks. The highest prices in Cuba are for United States manufactured goods, which you would have little occasion to buy. Amusements, living, and personal services are all extremely reasonable.

So there's no reason, outside of time and $200 (unless it be these war clouds that have finally burst over us), why next summer, or any time soon that you are free, you can't begin the job of being a better American by knowing America, all of America, better. Why not start in Cuba?

New Industries in Latin America

DOROTHY M. TERCERO
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THE twenty-nine months that have gone by since the fateful announcement was made by the late British Prime Minister, Mr. Neville Chamberlain, on September 3, 1939, that the British Empire was at war with Germany, have left their indelible mark not only on the nations of Europe but on the nations of the Western Hemisphere as well. When hostilities first broke out, the Latin American countries, although not involved directly, had to face the fact that their trade with Europe was due to suffer a catastrophic disruption. That disruption affected not only their exports, which for most of them were a vital part of their economy, but also their imports of the manufactured goods so necessary to their way of life.

For reasons that have been often enumerated—reasons such as small populations with restricted purchasing power, lack of domestic capital, credit, and markets, of developed electric power and fuel, and of adequately trained technicians—the Latin American countries through the decades that followed their establishment as independent nations were predominantly producers of raw materials rather than industrialists. The wave of industrial development that began to sweep other parts of the world during the 19th century scarcely grazed Latin America. Raw materials, and even agricultural products such as wheat, were sent abroad and local requirements for manufactured and processed goods were met by imports.

It was not until the First World War that manufacturing on any appreciable scale began to gain a foothold in Latin America. Much progress was achieved in many countries, but in practically all cases local industries were occupied predominantly in satisfying the fundamental requirements for food, clothing, and shelter—making textiles and shoes, for example, milling wheat and producing building materials. With a few exceptions, there was a general lack of heavy industry such as metallurgy or the manufacture of machinery or vehicles, and there was a lack in the chemical industry in such fields as synthetic products, explosives, mineral derivatives, fertilizers, and similar products. When the Second World War broke out, it found Latin America still dependent upon imports for a large portion of its needs for manufactured and processed goods.

At this point, however, the picture begins to change. Necessity, it seems, is indeed the mother of invention. The emergency brought about by the loss of European sources of supply for manufactured items, the difficulties of exchange, the scarcity of shipping facilities and, more recently, the priorities restrictions on account of hemispheric defense measures of the United States—which is almost the only large source of imports left open—have resulted in a great impetus to industry in practically all of Latin America which may well be of enormous and lasting importance.

This article is based in large part on news items of countries and commodities that appeared during 1941 in Foreign Commerce Weekly, *a publication of the United States Department of Commerce, Washington.*

The following résumé of industries that have been established or expanded in the various Latin American nations during the past year or two makes no claim to completeness. It skims the surface, attempting primarily to emphasize the trend. It shows that there is a definite effort and determination throughout Latin America to create or expand local industry in order to supply goods formerly imported. The consumption of native raw materials by native industry is increasing, with its resultant desirable effect on production of such materials. One of the greatest difficulties to be surmounted at present is the obtaining of machinery for new enterprises. This survey reveals above all that the countries of Latin America are awakening to their dormant possibilities and are trying to solve the urgent problem of meeting their own needs—perhaps even reaching an export level for certain products—by a method that is bound to reflect beneficially upon their economic and social life.

Textiles

As a result of weakened foreign competition and, in some cases, of the fact that imports were hampered by the exchange situation, textile industries generally throughout Latin America have recently been operating at capacity, and in many countries there have been numerous expansions and new enterprises.

In *Brazil*, the largest Latin American manufacturer of textiles, whose cotton goods have reached the status of an export product,[1] a number of cotton-thread and textile manufacturers are planning to modernize and expand their plants. In *Peru* the manufacture of cotton, woolen, and rayon textiles increased in 1940 by at least 10 percent, and this active rate of operation continued through 1941. The large cotton mills that formerly manufactured only sheetings and ginghams imported machinery from the United States and the United Kingdom in order to increase their assortments of piece goods. Altogether, 700 new looms were installed in various cotton mills. The rayon-weaving industry, first established in Peru in 1935, has undergone rapid development. Early in 1941 8 mills were in operation with a total of 530 looms, and plans were afoot for the construction of a rayon-yarn plant.

In *Chile* the Corporación de Fomento (Development Corporation) recently provided for a loan of 100,000 pesos to a Chilean firm to enlarge a factory that makes a cotton textile impregnated with celluloid, useful in the manufacture of shoes. In *Uruguay* a company with a capital of 3,000,000 pesos was organized in 1940 for the purpose of erecting a cotton-spinning mill. Orders for the necessary machinery were placed in the United Kingdom and the United States, and the plant was expected to be in operation during the latter part of 1941. In *Colombia* textile mills have been operating at full capacity for more than a year. There were plant enlargements in the mills at Medellín and further expansions are now being planned, for mills are still unable to satisfy the strong current demand. The republic has but one rayon-yarn factory, established in 1939, which has recently been attempting to acquire additional equipment in the hope of ultimately increasing its production of rayon yarn from its present maximum rate of about 77,000 pounds per month to 220,500 pounds. In *Guatemala* the recent establishment of two additional cotton mills has caused an increased demand for both raw cotton and cotton yarn and has given an impetus to cotton growing. A Cotton Congress held in Buenos Aires in December 1940, considering the

[1] *See* BULLETIN, *November 1941, pp. 653–654.*

Foto Williams

A SHOE FACTORY

In several countries new industries for the processing of tanning agents are being initiated in order to keep the already thriving shoe industry adequately supplied with leather.

question of *Argentina's* cotton surplus, resolved to take steps to encourage cotton manufacturing and the development of numerous small household cotton industries in suitable localities.

Fibers

Many of the Latin American countries are rich in native fiber plants. Much of the fiber is exported, but some of the countries have begun to use it locally in manufactures of bags, rope, and cord. *El Salvador*, for instance, which formerly exported all of its annual production of approximately 4,500,000 pounds of henequen, established in 1932 a bag factory, which was an immediate success. The factory, which has long supplied all local bag requirements, has expanded many times and now that the export demand is growing, the plant hopes to increase production until it can supply the needs of neighboring countries. This same factory also makes cord used in native handicrafts. The expected expansion of this industry will leave little if any surplus of henequen for export.

In *Chile* the Corporación de Fomento has recently made a loan of 500,000 pesos for purchase of land and construction of a hemp elaboration plant, to take care of an anticipated large hemp harvest in 1942. An additional fund of 100,000 pesos was established for studies of the manufacture of machinery for the hemp industry.

In *Colombia* government aid has recently been proposed for the *fique* industry. This is a native plant that produces a fiber that is comparable to sisal and that is widely used in Colombia as a substitute for both

sisal and jute. Large-scale development of the product is relatively recent but its expanded elaboration will be of considerable importance to the country, since practically all Colombian coffee is shipped in bags made of *fique*.

Domestic consumption of native fibers is expanding in *Brazil*, due in part to decreased availability of imported fibers and in part to government regulations that, seeking the development of native products, require an admixture of domestic fibers in products formerly made entirely of foreign ones. Efforts are being made to increase the production of *caroa*, one of Brazil's better known hard fibers, produced principally in the State of Pernambuco. It can be satisfactorily used for the manufacture of twine and cordage, and combined with jute and other fibers, in yarn for the local manufacture of men's suitings. At Vitória, State of Espírito Santo, a new factory has been constructed for the manufacture of bags. A mixture of two fibers will be used, jute and *Guaxima roxa*, a native plant. The utilization of this latter fiber has hitherto been quite limited, but the new factory, which has 34 looms, contemplates an annual output of 1,500,000 bags. Experiments in the cultivation of Indian jute have been reported to be successful in the Amazon Valley. Approximately 350 tons were produced in the State of Amazonas in 1940 and the 1941 production was estimated to be three times that figure. The successful cultivation of this fiber would mean that Brazil could produce an item which it formerly had to import in large quantities and for which a constant demand exists in the other American republics.

In *Peru* flax growers, agricultural associations, and government agencies made efforts in 1941 to obtain seed for additional flax acreage; and in order to pay for enlargements of the government's flax processing plant at Barranca, the charges to growers using the plant were increased approximately 20 percent.

Medicinals, crude drugs, essential oils, and toiletries

The curtailment of imports from Europe of perfumes, toilet waters, lotions, soaps, pharmaceutical products, drugs, and essential oils has given rise to new industrial and agricultural activity in some of the Latin American countries.

In *Panama*, where French perfume has long been an important trade item, an importer and wholesale dealer installed manufacturing equipment in his warehouse and began to manufacture his own toiletries.

The cultivation of medicinal plants and the production of essential oils used in both medicines and perfumes represent developments that loom large in Latin American industry. In 1941, for the first time, the *Dominican Republic* began to export the medicinal drug aloes. Most of the product is coming from wild aloe plants and consequently the present annual production is not much above 45 to 50 tons a year. But producers, hoping to establish the Dominican Republic as a permanent source of supply, even after the war, are planting fields of aloe, and it has been estimated that by 1942 production may increase to about 100 tons a year. In *Guatemala* considerable publicity has recently been accorded cinchona bark. At the November 1940 National Fair an instructive exhibit was installed showing details of cinchona cultivation and preparation of quinine sulfate. For the past two years there have been exports of the bark (approximately 75,000 pounds in 1940), and although its average yield at present is only about 3 percent, making it unprofitable for medicinal purposes, it is useful in certain metallurgical operations.

In *Argentina* the local drug industry was handicapped during 1940 by difficulties in obtaining raw materials, but nevertheless it continued to manufacture or compound over 90 percent of all medicinal and pharmaceutical products sold in the country. To take care of the raw material situation, there has been a notable expansion during the past two years in the cultivation of medicinal plants and herbs such as camomile flowers, stramonium, malva, peppermint, dandelion, and fennel, and simultaneously an increased production of essential oils such as peppermint, lavender, fennel, grapefruit, orange, lemon, eucalyptus, and anethol.

In *Peru*, too, the war has increased medicinal production, some of it entirely domestic and some of it the elaboration and packing of imported products. Appreciable quantities of cocaine are now being produced from domestic coca leaves. The cultivation of medicinal plants and production of essential oils is a new development in *Chile*. A single producer, who started ten years ago with a few seeds imported from Europe and who for some time had but a limited production, is now filling domestic requirements of many products formerly imported and even has an exportable surplus of some. Since the beginning of the war, Chile has received many inquiries from the United States concerning the availability of these products, and it is expected that such a demand will result in an even greater expansion of this industry. The Corporación de Fomento has provided for loans to farmers for the cultivation of medicinal and spice plants and the production of essential oils. The cultivation of peppermint and lavender is still not enough to supply domestic requirements but it is hoped to expand and attain an exportable surplus of considerable proportions within two years. Pine and eucalyptus oils are already being exported in addition to supplying home needs, and the plan is to increase the output heavily. The production possibilities of eucalyptus, especially, are practically unlimited, for an incalculable number of such trees grow in Chile. Fennel and boldo oils can also be produced in large quantities if markets are found. A recent survey showed that the following additional medicinal and spice plants are produced in Chile in a volume that allows, will soon allow, or can allow upon demand, an exportable surplus: pyrethrum, fenugreek, coriander, white mustard, borage, poppy seed, saffron, goat's rue, marjoram, sage, ratany root, and soapbark. The trees from which this latter item is taken grow wild in Chile. Formerly the country's annual export of soapbark, amounting to approximately 2,750 tons, went mostly to Germany, but it will now be available for shipment to the United States.

Brazil is increasing not only its manufactures but also its exports of drugs and pharmaceutical preparations, as statistics for 1940 and 1941 show.

Chemicals

Another expanding industry is the manufacture of chemicals and their related products. In *Colombia* a sulfuric acid and copper sulfate plant is enlarging its manufacturing facilities. A new corporation, capitalized at 400,000 bolívares, has been formed in Caracas, *Venezuela*, for the production of caustic soda, liquid chlorine, and various byproducts. Application was recently filed for the purchase of the necessary equipment in the United States, but in view of defense priorities the date of delivery has become slightly problematical. In *Mexico* the local manufacture of many kinds of chemicals has had a notable impulse. During the past year a new plant was established for the manufacture of precipitate of calcium carbonate and of

various magnesium products (carbonate, oxide, hydroxide, and chloride). Another new plant is manufacturing stearic acid; another, citric acid; another, liquid caustic soda; another caustic soda, cellulose, and kraft cellulose; another will make cellulose by the chloride-alkaline process from such materials as bagasse, esparto or matweed, banana stalks, and *zacatón*, a native fiber. In *Brazil*, too, there is a new caustic soda plant.

A new industry in *Mexico* is the extraction of tanning materials from the cuttings of certain native trees. In *Colombia* tanners are seeking a substitute for formaldehyde as a pigment-fixing agent in the tanning of shoe leather, as present difficulties in obtaining that chemical are causing serious concern to the country's thriving shoe industry. Studies are also being made by officials of the Colombian Government looking toward the establishment of a plant for the manufacture of chemical products derived from sodium chloride. In Chile the Corporación de Fomento has recently authorized the investment of 100,000 pesos in industrial experiments, including, prominently, the distilling of coal tar, which is expected to lead to new industrial activity.

Fertilizers offer another field in which considerable activity is apparent. *Mexico* has three new fertilizer plants, one at Torreón, another at Saltillo, and another in the course of construction at Mexico City. It is expected that domestic consumption of bones resulting from this increased activity will reduce bone shipments to the United States. Another Mexican development along these lines is the recently established industry for the utilization of marine products in the elaboration of fertilizers.

Attempts are being made in *Brazil* to produce plantation timbó. The timbó plant, from the roots of which is prepared a powder that serves as the base of certain non-poisonous agricultural insecticides, grows wild in the lower Amazon Valley. Exports of the powder (regulations prohibit the exportation of unprocessed timbó) totaled over 600 tons in 1939, and with the anticipated experiments in plantation production, this figure is expected to increase.

Paper and related products

Another activity which enjoys prospects for development and expansion in many Latin American countries is the paper industry, both the production of paper and paperboards and of pulp. In *Argentina* several new paper establishments have begun to operate during the past two years. The problem of obtaining adequate supplies of pulp has in part been met by an expansion of the domestic pulp industry, particularly straw pulp. In *Brazil* announcements have been made of the development of new processes for the production of chemical pulp from Paraná pine. Arrangements were completed about a year ago to finance a large-scale plant in southern Brazil for manufacturing newsprint that would utilize that species of pine. Another new project was started for the manufacture of wood pulp for writing paper, using 75 percent pine and 25 percent eucalyptus.

Paints and pigments

The *Argentine* paint industry has expanded so widely in recent years that domestic manufacture now supplies most of the national demand for ready-mixed paints, lacquers, and other finishes. In *Mexico* the local manufacture of paints, varnishes, and lacquers is eliminating foreign competition to a growing degree, and in *Peru* there has likewise been some recent expansion and new enterprise in that field.

Tung nuts, the oil of which is used in the

manufacture of paints and varnishes, have been under rather limited cultivation in *Paraguay* for some time, but official experiments are now under way to develop a wider cultivation that will produce a quantity sufficient for use in the paint industry. One of the larger flour mills in *Paraguay* was recently reported to have under consideration the installation of machinery for tung oil extraction.

Cement

Cement is a product that is universally in demand. In *Peru* the industry is undergoing a definite expansion and existing plants have for some time been operating at full capacity. It was planned some months ago to establish new plants in Arequipa and Chiclayo. One of *Mexico's* largest cement mills recently undertook extensive plant enlargements. A new plant in *Nicaragua*, expected to supply the larger part of the country's demand, will be ready for operation early in 1942. The new factory near Cali, *Colombia*, started production at the rate of 100 tons per day at the beginning of 1941, and shortly thereafter the two leading plants in the Bogotá area were enlarged. In *Brazil* plans were made some months ago for the erection of new plants at Baía and Rio Grande do Sul.

Lumber

Lumber and the elaboration of its related products are providing another field of industrial activity. *Peru's* lumber industry has recently undergone some expansion; at Barranquilla, *Colombia*, a new plant was equipped and began operations in 1941 for the manufacture of veneer for packing cases; and in *Mexico* the establishment of a

PARANÁ PINE LOGS READY FOR SHIPMENT

This type of pine is being utilized in Brazil's new pulp manufacturing plants.

new factory for the manufacture of laminated woods (plywood) was authorized in February 1941.

In São Paulo, *Brazil*, a firm recently began to manufacture a product that may prove of great significance to the Western Hemisphere. From the bark of four or five different trees found in Brazil this factory is making an insulating material that very closely resembles corkboard in both weight and appearance. Cork, long an important item in world commerce, has recently acquired new status as a critical material because of its many uses in articles of war. Almost the only source of supply has been the areas bordering the Mediterranean Sea, which makes it no longer available to the Western Hemisphere. Thus the Brazilian bark may very well become of immense importance, both to Brazil as an article of export and to the hemisphere as a defense material. Estimates vary as to the amount that could be prepared annually for export, but some reports have indicated that it could be made available in vast quantities. This past year purchases of the bark by Brazil's two factories amounted to about 4,000 tons each.

Construction

Building, both public and private, is relatively active in practically all the Latin American countries and in some it has attained almost boom proportions. New industries and the expansion or reconditioning of existing ones are requir-

Courtesy of the Cerro de Pasco Copper Corporation

THE COPPER SMELTER AT OROYA, PERU

Mining is one of the oldest industries in Latin America, having been carried on in many places by the Indians before the arrival of Europeans. Articles of copper, gold or silver have been found in many archeological remains.

IRON AND STEEL MILL AT MONTERREY, MEXICO

Latin American iron and steel works are all operating at capacity and many of them are making extensive plant enlargements.

ing construction and many other projects are also under way. The most significant feature of all this construction activity is that everywhere native materials and nationally made builders' supplies and equipment are being used to the fullest possible extent. In *Argentina*, for example, the Government some time ago embarked on a grain elevator construction program that called for the completion of large elevators already started in some chief ports, the initiation of terminal elevators in several other ports, and the building of about 250 small elevators at interior points. About 90 percent of the materials for the inland elevators was expected to be of Argentine origin. In March 1941 the General Treasury of *Chile* authorized the transfer of 20,000,000 pesos to the Corporación de Fomento for the construction of low-cost houses. In *Peru*, *Brazil*, *Colombia*, and *Mexico*, during both 1940 and 1941, there was an increasing demand for building materials that was indicative of new construction.

Mining

The outbreak of European hostilities in 1939 raised serious barriers to the international flow of minerals, for both belligerents and neutrals almost immediately adopted innumerable restrictive and control measures. Thereupon the mines of Latin America assumed tremendous significance in the hemispheric defense program that was evolved after September 1939. Some of the highly important strategic materials were already being produced in quantities that made the American republics good sources of supply but, while the potential production of others was great, actual production was often limited and needed much development to meet requirements. The urgency of that situation is being met by both local initiative and action of the Export-Import

Bank of Washington and the Metals Reserve Company, a subsidiary of the Reconstruction Finance Corporation. Brazil's new iron and steel mill, for instance, is being financed in part by an Export-Import Bank Loan.[1] Iron has been mined in Brazil for the past 350 years and considerable advances in the iron and steel industry have been made recently, but the demand for these materials has been increasing along with Brazil's new railway, industrial, and construction developments. The new mill is expected to fill about 50 percent of present domestic requirements.

The Metals Reserve Company has made arrangements with several countries to purchase supplies of strategic materials, such as Bolivian tin and tungsten; Argentine tungsten; Mexican antimony, arsenic, bismuth, cadmium, cobalt, copper, fluorspar, graphite, lead, manganese, mercury, mica, molybdenum, tin, tungsten, vanadium, and zinc; and Brazilian bauxite, beryl ore, chromite, ferronickel, industrial diamonds, manganese, mica, quartz crystals, titanium (rutile), and zirconium. This certainty of a market, coupled with the vital need for such materials in continental defense, naturally acts as a stimulus to the mining industry.

Aside from Metals Reserve purchases, however, there are other developments. In *Peru* a commission was recently appointed by the Government to review the possibilities of establishing a steel industry in that country. *Mexico* has three large iron and steel mills, all operating at full capacity, and one of them is making extensive plant enlargements. The Corporación de Fomento in *Chile* lent 5,000,000 pesos to one mining company to complete installation of a mercury recovery plant, 1,000,000 pesos to another firm for the exploitation of manganese mines, and 300,000 pesos for exploration and exploitation of coal areas. *Brazil* is to have a new aluminum plant in Minas Gerais with an estimated annual capacity of 3,000 tons. In *Mexico* a graphite processing plant is being erected, and early in 1941 *Nicaragua* imported a considerable quantity of new mining machinery for improving national mineral output.

[1] *See* BULLETIN, *December 1940, pp. 830–33.*

Railway, automotive, and aeronautical products

The manufacture of this type of equipment is making some headway in Latin America. One of *Mexico's* automobile assembly plants is enlarging. In *Brazil* a decree was signed a few months ago placing 14,000 contos (approximately $720,000) to the credit of the Federal Ministry of Communications for the construction of a motor factory. Brazil's gasogene law, requiring that owners of ten or more auto vehicles have one in every ten equipped for the use of gasogene as a substitute for gasoline in order to conserve the country's supply of that vital fuel, went into effect on July 15, 1941, and prior thereto a new factory to produce gasogene apparatus for installation in automotive vehicles was built in Belo Horizonte. The airplane factory at São Paulo, Brazil, which was organized in 1931 for the training of pilots and airplane mechanics and which began in 1935 to produce planes on an extremely limited scale, has now abandoned its training school and is devoting all its attention to the manufacture of planes. At present these can be produced at the rate of 3 to 5 a month. Although many of the essential parts of these planes, such as motors, navigation instruments, steel tubing, and rubber tires, must be imported, the effort is made to use as much domestic material as possible. Native Brazilian woods are used, and propellers, cotton fabrics, paints, varnishes, and alu-

A YUCA SALES MARKET

Western Hemisphere yuca is beginning to take its place as a substitute for the now scarce Far Eastern product, the source of tapioca.

minum wheels are all of domestic manufacture.

In *Bolivia* the car shops at Ladario, even before their final completion, turned out 10 gondola cars, and the manufacture of 100 more was planned. In *Mexico* part of the National Railways' requirements for new freight cars is being filled by local car factories.

Foodstuffs

The production and processing of all kinds of foodstuffs, for both home consumption and export, are everywhere undergoing a remarkable expansion. Many of the governments have taken definite steps to encourage the cultivation of basic food crops, at least to the extent of supplying home needs for products formerly obtained from abroad, and to stimulate the establishment or expansion of food processing industries.

Both *Brazil* and *Venezuela* are expanding their meat packing industry. The chief demand is for tinned meat. Plants in Brazil are working at capacity and in Venezuela a new plant installed by the Ganadera Industrial Venezolana has very recently begun to operate. The inauguration of its activities was held up for a while pending receipt of sufficient tin to make 5,000,000 containers. The organization expects to offer a tinned meat product that will be able to compete in quality and price with similar products from other countries.

Several months ago the *Panamanian* Government, having in mind the establishment of three complete rice mills, was seeking specifications from American manufacturers for rice mill machinery and equipment; and at the same time the Government was interested in securing plans, machinery, and equipment for the establishment of a marine salt refinery. *Paraguay* passed a law more than a year ago exempting from import duties the machinery, equipment, and materials for a new flour mill.

In *Cuba* some months ago yuca growers and starch manufacturers sought assistance from the National Department of Agriculture to enable them to meet the United States market demand for tapioca. If this demand is to be met, production must be increased; and recognizing the fact that their products were not of the same high quality as those of the Far East, manufacturers expressed themselves as eager to improve their processes. This can be done with the investment of more capital in already existing plants, which is what the manufacturers desire rather than the erection of new plants at present.

In *Mexico* a new establishment for preparing frozen fowl and broken eggs in tins has been initiated and in *Brazil* a firm planning to build a local plant to produce liquid and dried egg products was recently granted permission to import necessary machinery free of duty. In *Chile* the Corporación de Fomento made a loan to the Chilean Poultry Association to buy and store the spring surplus of eggs to release to the market in the winter. *Argentine* cheese of various types is finding a ready market in the United States and its manufacture is appreciably expanding. Condensed milk factories have been constructed in both Arequipa and Chiclayo, *Peru*.

The fishing industry is still another that is being given special attention in several countries. Some months ago *Peru* appointed a technical commission to explore the possibilities of such an industry and preliminary reports were of a favorable nature. *Mexico* has had a sizable fishing industry for some time, but a new branch of it was recently established for the extraction of fish oils and consideration is

Courtesy of Guatemalan Legation

LATIN AMERICAN CHEESE FOR UNITED STATES MARKETS

The war has given new impetus to cheese manufacturing in Latin America. The various European cheeses are now being replaced in United States markets by Argentine and other Latin American products.

CHILEAN FISHERMEN UNLOADING THE DAY'S CATCH

In connection with Latin America's extensive fishing industry new activities, such as the extraction of fish oils and the elaboration of fertilizer from marine products, are arising.

being given by fish warehousemen in Veracruz to the utilization of fish livers. If the livers of fish taken in that area prove suitable as sources of oil, it would be possible to refrigerate and export the whole livers.

When the curtailment of European markets, transportation difficulties, and other war disturbances struck hard at orange growers and exporters in the State of São Paulo, *Brazil*, a factory for the processing of orange products was built at Taubaté. The plant, completed about a year ago, produces not only concentrated orange juice of accepted commercial grade, but also fodder for cattle, and a pulp that can be used in the local manufacture of paper. Its capacity at present is about 500,000 boxes of oranges a year. Another step to aid the marketing of this fruit is the new orange refrigeration plant now under construction at Rio de Janeiro.

In *Guatemala* new industrial enterprises are engaged in the manufacture of flavored gelatines and the extraction of avocado oil. The scarcity of tin for canning purposes has recently brought a new development to the fruit processing industry in *Chile*. The Agricultural Export Board obtained a loan of 2,600,000 pesos from the Corporación de Fomento for the construction of two fruit driers, fruit being a large crop in central Chile.

Special and miscellaneous products

The number of new industries throughout Latin America that are engaged, to a greater or less degree, in the manufacture

of various special products is surprising.

In *Guatemala* these diverse lines represent new industrial activity: wooden toys, school and carpenter's crayons, and metal furniture for hospitals and clinics. New plants in *Peru* are manufacturing toys and nails, and the exploitation of large oyster shells found in the rivers of Eastern Peru is being investigated as a possibility for the manufacture of buttons and other shell articles. *Colombia* has several new factories: one at Barranquilla for the manufacture of plastic tableware, cups, plates, and trays; and two plants, at Barranquilla and Cali, for the production of cheap metal kitchenware, knives, forks, and spoons. At Santiago, *Chile*, a firm was recently authorized to establish a radio receiving set manufacturing and assembly plant with a capacity of 25,000 sets per year. In *Brazil* there has been considerable extension in the manufacture of all kinds of hardware. In the machine tool industry, particularly, the number of types of tools has increased and the quality has been much improved. During 1940 the National Coffee Department of Brazil put Brazilian coffee to work in a new industry through the erection of an experimental plant for the manufacture of plastics from that familiar little bean. The consumption of another large plant, under construction at Sorocaba, was expected to be about 5,000,000 bags of coffee a year.

In *Mexico* a great number of new lines of manufacture have sprung up during the past year, ranging all the way from boats, gliders, and skis for sporting purposes to funeral accessories. Added impetus to new industrial initiative in Mexico was given by the governmental decree that exempted necessary equipment and raw materials not obtainable locally from import duties and the enterprise itself, if absolutely new to the country, from taxation for a period of five years.

The manufacture of rubber goods has been stimulated in several countries. In *Brazil* rubber refining and manufacturing machinery imports increased heavily in 1940. In *Venezuela* a rubber tire manufacturing establishment was installed. In *Colombia* a company at Barranquilla began to manufacture rubber toys and balloons. In *Cuba* the construction of two rubber goods factories was started in 1940, both of which began operations in 1941, one near Habana and the other at Matanzas. The former makes automobile and truck casings and inner tubes, rubber-soled canvas footwear, and molded household items. The second company is at present making only tennis shoes, at the rate of 200 to 300 pairs per day, but it plans to undertake the manufacture of other goods, such as rubber heels and rubber cloth, as soon as the tennis shoe production is satisfactorily established.

Mineral Resources and Products on Stamps of the American Republics

BEATRICE NEWHALL

Assistant Editor, BULLETIN *of the Pan American Union*

THE mineral wealth of the Americas was the magnet that drew sixteenth-century Europeans to the New World to explore, conquer and colonize. The search for and exploitation of gold was uppermost in the mind of every one, from king to commoner. And because in the lofty ramparts of the two Americas that stretch almost uninterruptedly from Alaska to Tierra del Fuego there lie hidden the precious metals that have been the symbol of worldly wealth since the dawn of history, it was in or near the mountains that the development of the two continents was centered in the hundred years after the Discovery, while men were learning the true nature and extent of the New World. The agricultural resources of this hemisphere and the baser metals, without which modern industry would wither away, were tardily appreciated.

The subjects illustrated on stamps devoted to mineral resources fall into four classifications: mining in general, metals, nonmetallic minerals, and precious stones.

Mining, miners, mining towns, and mineral products have been pictured on many stamps of the American republics, but chiefly in recent years, an evidence of the growing appreciation of the place industry occupies in the modern world.

During colonial days the Viceroyalty of Peru was considered one of the richest regions of the world. The fact that the Incas had vainly sought to ransom their ruler Atahualpa by filling a huge chamber with gold, much of it worked into beautiful ornaments, was evidence to the early Spanish conquistadors that they had found the land of wealth they were seeking. That they were not mistaken was proved in the ensuing years by the constant stream of mineral wealth that poured from the heart of the Andes to swell the coffers of the King of Spain. Enough stayed in the country, however, to allow the homes of the wealthy creoles to vie in luxury with those of the Court in the mother country.

Peru first paid tribute on stamps to the mining industry in its 1931–32 issue, whose 50-centavo stamp shows a mining town and has the legend *La Minería* (Mining). A few years later (1936–37) an airmail series also depicted on the 50-centavo stamp a mining town; the legend gives specific information on the variety of mineral wealth Peru can boast: *El Perú produce oro, plata, cobre, bismuto, plomo, vanadio, tungsteno, molibdeno, zinc, estaño, hierro, etc.* (Peru produces gold, silver, copper, bismuth, lead, vanadium, tungsten, molybdenum, zinc, tin, iron, etc.).

In colonial days the present republic of Bolivia was part of the Viceroyalty of Peru. Its mineral wealth was among the first to be exploited by the Spaniards in America, and Potosí, "the mountain of silver," became proverbial in the Spanish-speaking world: to describe something as being "worth a Potosí" was the equivalent to saying that it was of enormous value. Potosí has also been described as "a table

MINING IS AN IMPORTANT INDUSTRY IN CHILE, BOLIVIA, AND MEXICO

of silver on legs of gold," and the first coat of arms of the city, granted by the Emperor Charles V, bore the legend: "I am rich Potosí, the treasure of the world, the king of mountains, and the envy of kings." From Potosí alone more than 3,000,000,000 *pesos fuertes* of silver went to the Crown of Spain as its share—"the royal fifth"—during the colonial period (1545–1825), and in the city that grew up at the foot of the fabulous mountain a royal mint was established as early as 1572.

Two Bolivian stamps portray the mountain Potosí, although no mention is made on them of the mining activities there. The first was the 1-centavo stamp in the 1916–17 series, the second, the 2-centavo stamp of 1931. In the 1938 airmail series, the 20-centavo stamp depicts the courtyard of the 18th century mint at Potosí, its massive arches suggestive of the strong vaults where the treasure was stored while awaiting shipment. It is interesting to note that now the production of tin from Potosí outranks that of silver, and that accumulations of slag from colonial days have been worked to reclaim their store of a metal vital for modern industry.

Mining as an industry has been the subject of two Bolivian stamps. In the series issued in 1925 as part of the celebration of the first centenary of independence, the 1-centavo stamp depicts symbolically a miner at work with his pick. A modern miner using a pneumatic drill deep in the fastnesses of the earth is shown on the 30-centavo stamp of the 1938 airmail series.

The exploitation of the mineral resources of Chile give it first rank in South America as a producer of copper, nitrate, and coal. It is fitting, therefore, that this country also should have issued two stamps with mining in general as their theme. The first, the 30-centavo stamp in the 1936 issue, shows a modern mountain mining camp framed by a huge conveyer and bearing the legend *Minería* (Mining). The second, a 50-centavo stamp issued in 1938 and having the same legend, pictures a mining port.

In the development of the western United States the mining prospector played no small part, and his occasional spectacular rise to fabulous wealth and more frequent record of heart-breaking failure have been set down in history and romanticized in fiction. Recognition of his role in American expansion was given in the 50-cent stamp, entitled *Western Mining Prospector*, in the Trans-Mississippi Exposition issue of 1898.

Notwithstanding the fact that Mexico is one of the richest repositories of minerals in the Americas, that country has never advertised its mines or their products on stamps. Popocatépetl and Ixtaccíhuatl, the twin mountains that stand guard over Mexico City and that are affectionately remembered by all visitors to that capital, do, however, appear on two air mail stamps. Because the ascent of the former is still considered no mean feat, few who look on its majestic silhouette recall that during the early years of Cortés in Mexico, before the fall of Moctezuma and the complete conquest of the Aztec capital, Spanish soldiers availed themselves of the sulphur deposits in its crater for their ammunition. One of the designs is found in the 1929 series issued to commemorate the Mexican aviator, Capt. Emilio Carranza, who died in a plane crash on his return from a good will flight to the United States in 1928. The other picture of the two mountains is on the 75-centavo stamp in the 1934 series honoring the National University.

Of the precious metals, only gold and platinum have had stamps dedicated to them. Fittingly enough, three of the stamps devoted to gold come from Colombia, the land where the Spaniards first

heard the legend of El Dorado, the Golden Man. In the passage of time, the original meaning of the term has been perverted, until now it stands for any region of untold wealth. Colombia's production and exportation of gold exceeds that of any other South American country. In 1940, the output of gold amounted to nearly 632,000 fine ounces, almost all of which was exported to the United States. Practically the entire output comes from the golden sands of the Magdalena River and its tributaries.

In 1932 Colombia issued a series of five stamps to indicate its chief natural resources. The 10-centavo shows, above the legend *Minas de Oro* (Gold Mines), a miner, his pick by his side, holding a gold nugget. Three years later a similar stamp of the same denomination was printed, bearing the same legend and showing a miner resting, his pick between his knees. Gold itself is the theme of a 1932 airmail stamp (the 1- and 2-peso denominations), the central design showing gold coins pouring from a cornucopia, above which are crossed hammers over the word *Oro*.

In Ecuador, while there is large-scale exploitation of gold mines by companies with foreign capital, much of the precious metal is recovered from the streams by native placer miners. That phase of the industry is illustrated in a 1937 1-sucre stamp entitled *Lavaderos de Oro* (Gold Placers). On it is seen a man panning gold, while in the background, around a curve in the stream, another may be dimly discerned.

Peru, in addition to mentioning gold in the 1936 stamps described in an earlier paragraph, has another devoted to a specific gold region. It is the 5-sol denomination in the same series, which shows a mighty river and its tributaries as they flow through the eastern forest-clad slopes of the southern Peruvian Andes. The legend tells us that it is the Inambari, an affluent of the Madre de Dios, which, with the Beni and the Mamoré, forms the Madeira River, part of the great Amazon River system: *Región de la selva virgen regada por el Inambari con ricos lavaderos de oro* (Region of virgin forest watered by the Inambari with rich gold deposits).

Platinum is another metal that, because of its comparative rarity and cost, has come to be considered as precious. More than half the world production is now recovered as a byproduct of nickel, copper, and gold ores; before its value was realized, it was thrown out with the dross. Colombia, which ranks fifth in world production of this metal, obtains its platinum from placer mining. Platinum is chiefly found in the Intendencia (Territory) of Chocó, in the northwest corner of the republic. In 1939, the latest year for which figures are available, the exports of placer platinum were 39,070 troy ounces. The 8-centavo stamp in the 1932 series depicting the natural resources of the country has as its subject platinum mines; it shows a dredge working on a river that flows through wide plains.

During most of the 19th century, Chile was the world's leading producer of copper; since 1881, when it yielded first place to the United States, it has ranked second. What is believed to be the largest copper deposit in existence, with over a billion tons of known and probable ore reserves, is situated at Chuquicamata, inland from the port of Antofagasta. Other important deposits occur throughout the mountain wall that is the eastern boundary of this "ribbon republic," but the mines worked today lie mainly in the northern and central portions of Chile. The 40-centavo stamp of the 1938–40 series, bearing the legend *Cobre* (Copper), shows a smelter in operation.

Chile also leads South America in the production of coal. Coal mining has been

STAMPS DEPICTING COLOMBIAN EMERALDS AND GOLD FROM COLOMBIA AND PERU

COPPER, PLATINUM, AND COAL

in progress in the Bay of Arauco (nearly 400 miles south of Valparaiso) since 1840, and expansion of the industry was stimulated by the construction of copper smelters, the building of railways, and the increased number of ships in Chilean ports requiring fuel. Although production in 1940 reached nearly 1,940,000 metric tons, this is insufficient to meet national requirements, and some coal must be imported.

The production records of the first large-scale producing mine in the country—the Lota—go back to 1852. In the 1936 anniversary series, therefore, this important phase of Chilean industry was commemorated on the 50-centavo stamp, which gives a view of the city of Lota, over the legend *Lota, Puerto Carbonero* (Lota, a Coal Port).

A third mineral, as a producer of which Chile stands preeminent, is natural nitrate; in fact, the country is unique in having the only commercially exploitable deposits known. From 1881 until after the First World War, when Chile supplied the world markets with this valuable element for fertilizer and for the explosive and chemical industries, the revenues from this one commodity were sufficient to meet a large proportion of government expenses. The utilization during the World War of a method of producing synthetic nitrate from the air had an unfavorable effect on the natural nitrate industry. However, improved mining and extraction methods have been devised to lower the cost of production, and Chilean nitrate is still in demand among farmers because it contains traces of various other elements which are said to add to its effectiveness as a fertilizer.

In 1930 Chile celebrated the centenary of the first shipment of its nitrate abroad, and issued three stamps stressing its value as a fertilizer. The 5-centavo stamp presents in a symbolic design the agricultural

uses of nitrate, and bears the legend *Salitre Significa Prosperidad* (Nitrate Means Prosperity). The 25-centavo stamp, with the same legend, shows a reaper holding a sheaf of wheat, and the 70-centavo stamp depicts a sower, silhouetted against the dawn of a new day.

Three stages in the progress of nitrate from raw material to finished product are shown on Chilean stamps. The first two are the lowest and highest denominations, respectively, in the series issued in 1936 to commemorate the fourth centenary of the discovery of Chile by picturing some of the natural resources of the country. The third is in the 1938–39 series, also devoted to that subject.

The 1936 5-centavo stamp depicts a part of the barren waste that lies between the Andes and the Pacific Ocean in northern Chile. The scene is entitled *Desierto de Atacama* (Atacama Desert). The 10-peso stamp illustrates one phase in the "mining" of nitrate—a great power shovel is scooping up chunks of the raw material from the surface. The 1938–39 20-centavo stamp shows a nitrate plant in full blast.

Petroleum is a mineral strictly modern in application. Although the exploitation of petroleum deposits in the United States and Mexico is of long standing, neither country has signalized its vast resources of that product on stamps. Five South American nations, on the other hand, have done so.

As regards Venezuelan petroleum deposits, a government official of that country spoke truly when he said that it had drawn a prize in the lottery of nature. Although systematic exploration and exploitation of this mineral have taken place only within the last quarter century, Venezuela now ranks first in the world among oil-exporting nations, and third in production. The existence of deposits has

CHILEAN NITRATE

PETROLEUM ON BOLIVIAN, ARGENTINE, VENEZUELAN, COLOMBIAN, AND PERUVIAN STAMPS

been proved in many parts of the country, but production is centered in two main regions: the jungles to the east, lying north of the Orinoco River and opposite the island of Trinidad, and the Lake Maracaibo basin, which includes all the state of Zulia and parts of several others. At the sites exploited on the shores of the lake, the vast forest of derricks marches down even into the water. Stamps of six denominations in the 1938 air-mail series show some of the derricks rising from the lake.

Colombia ranks second in petroleum production in South America. It was natural, therefore, that in the 1932 regular and air-mail series devoted to the resources of the country petroleum should be included. The 2-centavo stamp of the former pictures derricks and storage tanks over the legend *Petroleras* (oilfields), and the 15- and 60-centavo stamps of the latter have a different picture of the same subject, with the legend *Petróleo* (Petroleum). The 1935 2-centavo stamp is similar to that of the 1932 issue, but has greater detail.

The history of petroleum in Peru is of respectable antiquity, for there is evidence that this product was known to the Incas, who used it for medicinal purposes, for ritual illumination, and as an ingredient in mortar. For calking vessels the Spaniards used *brea*, a pitch resulting from the evaporation of crude petroleum and obtained from surface exudations in regions now exploited for oil. Exploration for oil was begun in the northern coastal region of Peru in 1864, and production dates from the early 1870's. Later petroleum was discovered on the other side of the Andes, and camps have been established at the edge of the jungle to extract the oil and ship it down the Amazon.

In 1932 Peru issued a 4-centavo stamp showing an oil refinery, entitled *El Petróleo*. A gusher in full activity was illustrated on another 4-centavo stamp, issued in 1936 and in 1937; its location is given in the legend, *Industria Petrolera, Talara* (Petroleum Industry, Talara).

Petroleum in Argentina is a state monopoly. Deposits are found in many parts of the country, especially in the eastern foothills of the Andes and along the Atlantic coast around Comodoro Rivadavia, the first place in Argentina where oil was discovered. The discovery was quite accidental: in putting down wells to provide an adequate water supply for the city, an oil gusher appeared on December 13, 1907. The single Argentine stamp dedicated to this product (50-centavo, 1936) shows the activity in this region: a derrick at the end of a pier, the picture being entitled *Pozo de Petróleo en el Mar* (An Oil Well in the Sea).

The vast petroleum deposits in eastern Bolivia are known to be exceedingly rich, but their exploitation has been hampered by lack of transportation. Highways to the oil fields are under construction, and recent agreements with Argentina provide for the financing of a pipeline across the border into and, equally important, for tariff exemptions on oil in transit across, Argentine territory. The Bolivian stamp dedicated to oil, the 10-centavo denomination in the 1938 issue, gives a sense of the potential value of this industry by a skillful use of perspective in the delineation of three wells silhouetted against the sky.

Of precious stones, only one—the emerald—has been the subject of an American stamp. This has been regarded throughout the ages as one of the most desirable gems, and the discovery of rich emerald deposits in Colombia was a source of gratification to the Spanish conquistadors. That country now stands first in the world as a source of this universally admired clear green stone. The Colombian mines

are state-owned and the most important state-operated; however, the Muzo mine, the largest, has been closed for several years.

Unsold emeralds are stored in the vaults of the Bank of the Republic, in Bogotá. Seven high government officials are necessary to open these vaults; unless all seven are present, the precious store is wholly inaccessible.

Emerald mines are the subject of two Colombian stamps, the 1-cent stamp in the 1932 natural-resources issue, depicting verdant mountain slopes with the legend *Minas de Esmeraldas* (Emerald Mines), and a lithographed stamp of the same denomination that appeared in 1936, with the same scene less clearly printed. In the airmail stamps of the 1932 series the 3- and 5-peso stamps (the two highest denominations, appropriately enough) portray a flawless cut stone; from its color alone one would recognize it for what it is, without the identification *Esmeraldas*.

Inter-American Student Forum

Essay Competition

SUBJECT: What Inter-American Cooperation Means to My Country.

LENGTH: Not more than 700 words.

ELIGIBLE: All students of high-school grade in the United States.

CLOSING DATE: Not later than April 14, 1942.

GRAND AWARD: A four-year university scholarship, valued at $6,000.00, providing tuition, travel, and all reasonable expenses at any college or university in the Western Hemisphere. At least two years must be spent at a Latin-American university or college.

STATE AWARDS: *First:* Fifty dollars and certificate of award.
Second: Twenty-five dollars and certificate of award.
Third: Silver medal.

Preparation

Use one side of the paper only. Papers may be typewritten or written with pen and ink. Each manuscript must bear the name, school, and home address of the writer in the upper left-hand corner of the first page. The name of the school principal also should be given.

Submission of manuscripts

Each contestant should present his or her paper to the school principal or designated teacher on or before Pan American Day, April 14, 1942, with the request that it be entered in the Inter-American Student Forum competition.

Judging

A committee of local educators in each high school will be appointed by the superintendent or principal to select the two best papers.

The two best papers from each high school will be forwarded to the State Superintendent of Public Instruction (the Commissioner of Education) not later than May 1, 1942. The State Committee will forward to the Pan American Union the three best manuscripts from the State or Territory on or before May 21, 1942.

The Grand Prize winner for the United

States will be selected by a Board of Judges consisting of distinguished citizens from the other American Republics. These judges will be named by the Governing Board of the Pan American Union, of which the Honorable Cordell Hull is Chairman. Only the one best paper from each State and Territory will be considered by the judges.

(Similarly, the Grand Prize winner for Latin America will be selected by a Board of Judges consisting of distinguished citizens of the United States.)

Information

All correspondence should be addressed to Inter-American Forum, Pan American Union, Washington, D. C.

Pan American Day—April 14, 1942

Program Material

To assist groups planning to observe Pan American Day, the Pan American Union offers the material listed below. Because of the limited supply, material can be sent only to teachers or group leaders, and only one copy of each item can be sent to the same address. Please order by number:

1. THE BULLETIN OF THE PAN AMERICAN UNION. This issue of the BULLETIN is dedicated to Pan American Day. It is hoped that the articles on recent economic and social advances in the Americas will prove useful.

2. INTER-AMERICAN COOPERATION. How the spirit of mutual helpfulness has developed among the American Republics.

3. PAN AMERICAN DAY. Its origin and significance, and suggestions for its observance.

4. ASK ME ANOTHER! A series of questions on the American Republics. (Revised edition.)

5. ECONOMIC GIFTS OF THE AMERICAS TO THE WORLD. Brief and simple descriptions of products which originated or which have flourished especially in the Americas.

6. UNA VISITA A LA UNIÓN PANAMERICANA. A unit of five lessons in conversational Spanish for high school and elementary college classes.

7. UMA VISITA À UNIÃO PANAMERICANA. A unit of five lessons in conversational Portuguese for high school and elementary college classes.

Plays, Pageants, and Radio Presentations

8. A PAN AMERICAN FRIENDSHIP PARTY. A play, by Dorothy Kathryn Egbert, Library Assistant, Queens Borough Library, Jamaica, N. Y. Suitable for upper grades of elementary schools.

9. CHRIST OF THE ANDES. A play, by Eleanor Holston Brainard. Requires about 15 minutes to present. Suitable for sixth grade pupils.

10. FIESTA PANAMERICANA. Description of a carnival, representing a fiesta as it might take place in a Latin American country. Takes about one hour and a half to present. Suitable for senior high school, college, and adult groups.

11. GREAT NAMES IN LATIN AMERICAN HISTORY. By Emilio L. Guerra, Benjamin Franklin High School, New York. Arranged and presented originally as a radio sketch, but might also be offered as a high school assembly program. Requires about 15 minutes to present.

12. A TRIBUTE TO PAN AMERICA. By John Tansey and Daniel Montenegro. A radio program presented originally over Station WRUF of the University of Florida. Adapted to colleges and high schools equipped to present radio programs. Takes the form of a visit to the other American Republics, with musical interpolations. Requires one hour to present.

The observance of Pan American Day offers opportunities for the writing and presentation of original material in the form of plays and pageants. The Pan American Union would appreciate receiving the script and performance details of original creations.

Other publications

In addition to the foregoing, the following are also available at the prices indicated, to cover the cost of publication. Remittance should be made to the Pan American Union by check or money order:

PAN AMERICA IN POSTER STAMPS. A series of twenty-four poster stamps in color of the American Republics, with an album in which they may be mounted and preserved, and which contains a map and interesting data on the Americas. Single set of 24 stamps and album, 15 cents; twenty or more sets ordered at the same time and sent to the same address, 10 cents each.

FLAGS AND COATS-OF-ARMS OF THE AMERICAN REPUBLICS. Reproductions in color of the flags and coats-of-arms of the 21 republics, with a booklet containing a brief description and historical sketch of each. 10 cents.

434736—1942

THE AMERICAS—A PANORAMIC VIEW. Major historical facts, principal geographical features, forms of government, products and industries, transportation facilities and educational systems of the 21 American Republics. A 32-page illustrated booklet. 5 cents.

EXCERPTS FROM THE NATIONAL ANTHEMS OF THE 21 AMERICAN REPUBLICS. Piano arrangement, 25 cents; six-piece orchestration, including piano part, 50 cents.

It is suggested that individuals or groups planning Pan American Day programs consult their local public or school library for material prepared in previous years by the Pan American Union. It is also recommended that material requested this year be deposited in such libraries for possbile use in future years.

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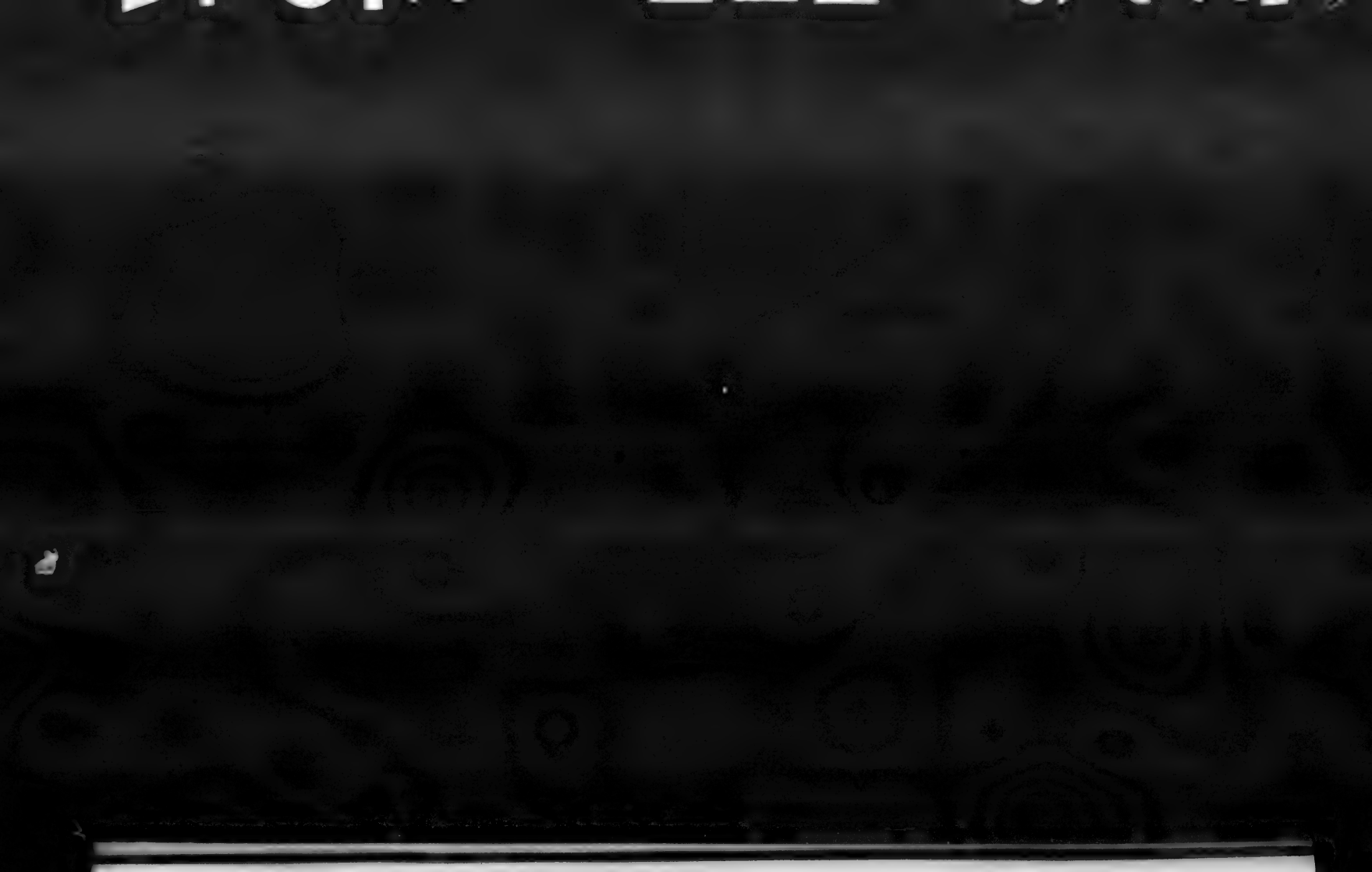

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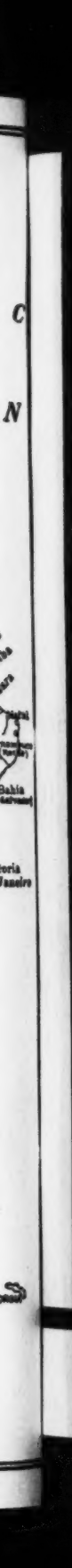
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